April 12, 1949. F. L. DUER 2,467,080

BASE FOR TABLES

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Fig. 1.

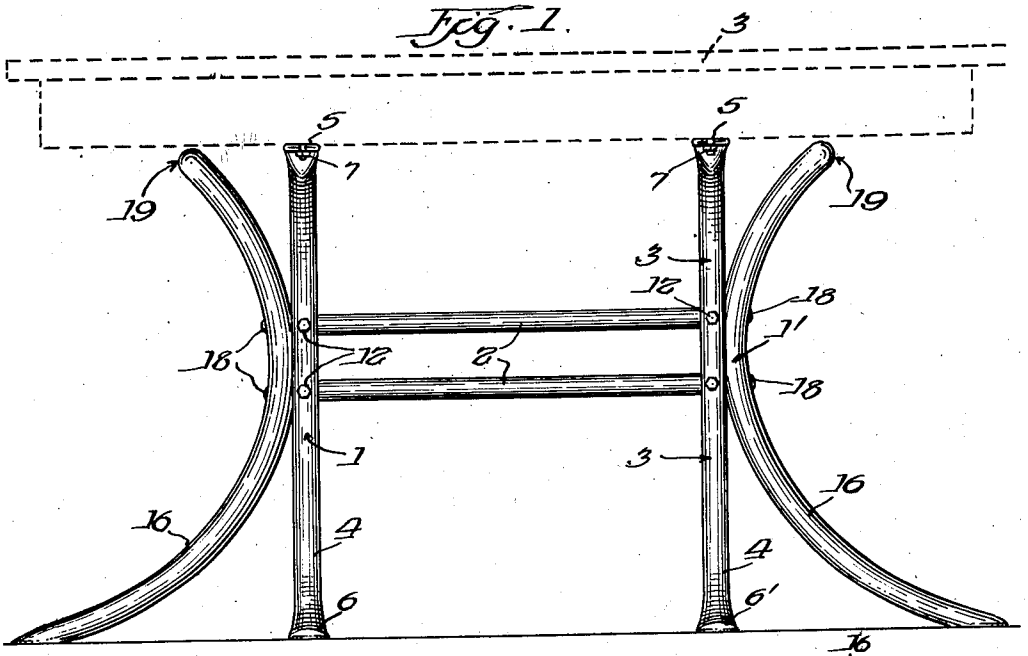


Fig. 2.

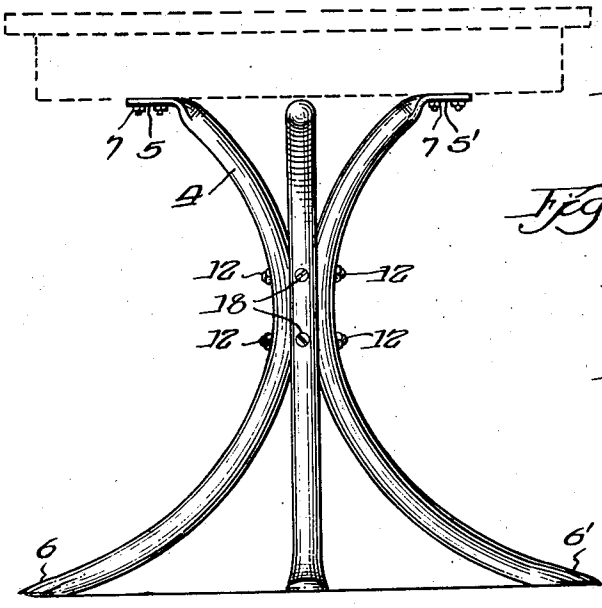
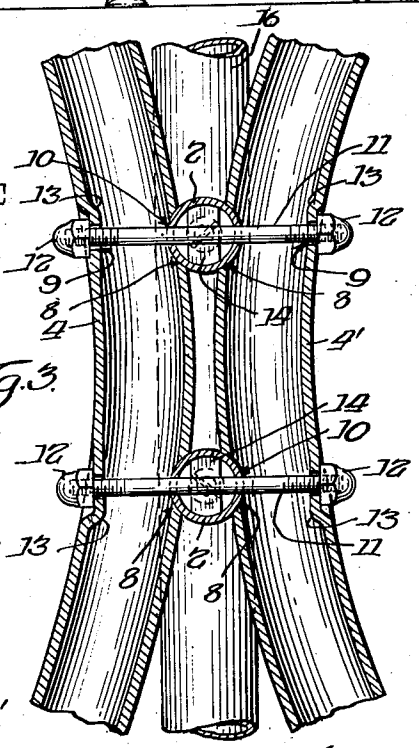


Fig. 3.



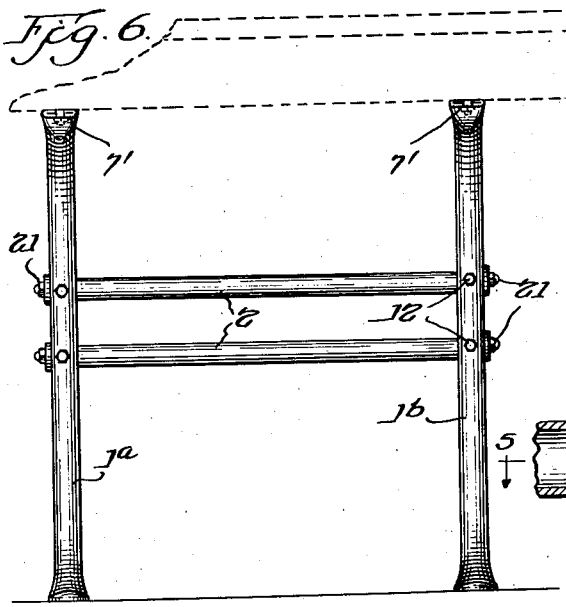
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Fig. 6.



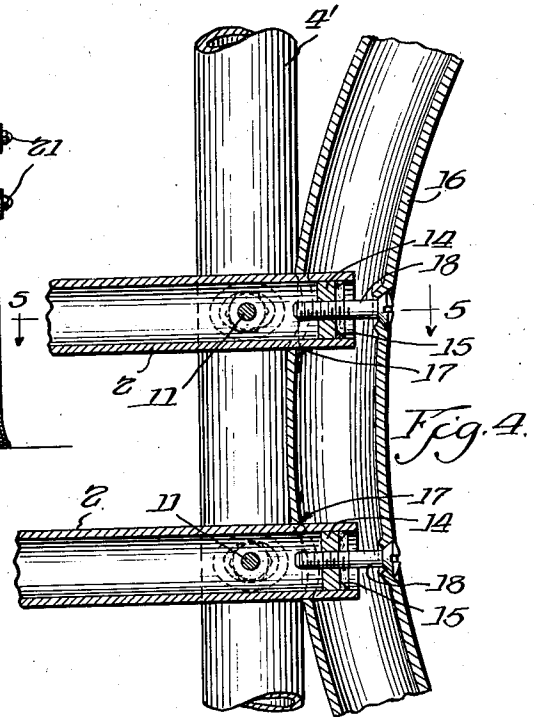


Fig. 4.

Fig. 7.

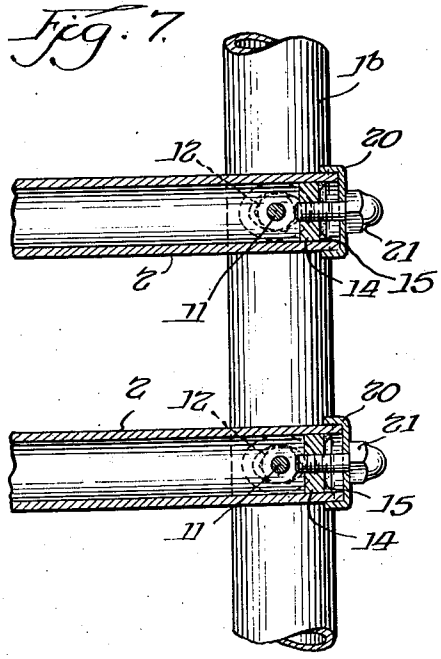
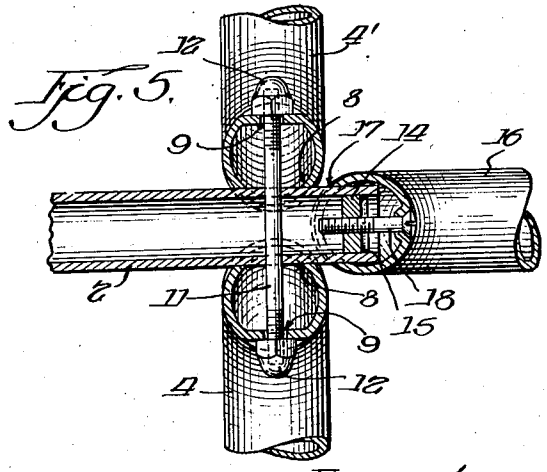


Fig. 5.



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Patented Apr. 12, 1949 2,467,080

UNITED STATES PATENT OFFICE

2,467,080

BASE FOR TABLES

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Application October 21, 1948, Serial No. 55,673

2 Claims. (Cl. 311—1)

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This invention relates to improvements in bases for tables, having for an object to provide a table base whose component parts are of construction and design so that they can be volume produced and then rapidly and securely assembled, all at a minimum cost.

It is also an object of the invention to provide a base for tables including grouped supporting legs firmly and securely interengaged and interconnected in operative relationship, said legs being individually and collectively cooperative in such relationship in a manner to produce a maximum degree of supporting efficiency.

A further object of the invention is to provide an assembly type of base for tables, the legs of which are capable of convenient, practicable, and compact packaging in knocked-down form for shipment facility and economy, and which, as and when required, can be quickly and effectually grouped in assembly and firmly interconnected.

Yet another object of the invention is to provide a table base of the multiple grouped or assembled leg character, novel means being employed for firmly interconnecting the legs and, according to production requirements, permitting certain of the legs of the grouped and interconnected assembly to be included or not included therein, this without in any manner detrimentally affecting the solidity and/or strength of the finished product.

The foregoing, as well as other objects, advantages and meritorious teachings of my invention, will be in part obvious and in part pointed out in the following detailed disclosure thereof, when taken in conjunction with the accompanying drawings, it being understood that the forms of the invention presented herein are precise and what are now considered to be the best modes of embodying its principles, but that other modifications and changes may be made in specific embodiments without departing from its essential features.

In the drawings:

Figure 1 is a side elevation of my improved table base, a table top, shown in dotted lines, being supported thereon.

Figure 2 is an end elevation thereof.

Figure 3 is an enlarged fragmentary detail in section, taken on the line 3—3 of Figure 1, looking in the direction in which the arrows point, illustrating the assembly of and interconnection between the supporting legs of a group.

Figure 4 is an enlarged fragmentary detail in section, taken at substantially right angles to Figure 3, illustrating the manner in which the

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end leg of a group is secured in assembled relation.

Figure 5 is an enlarged fragmentary detail in horizontal section, taken on the line 5—5 of Figure 4, looking in the direction in which the arrows point.

Figure 6 is an end elevation of a modified form of the invention, wherein but two legs are provided to an assembled group thereof, and

Figure 7 is an enlarged fragmentary detail in vertical longitudinal section, showing the manner in which the supporting legs of a group such as shown in Figure 6 are interconnected, and also, means for closing the ends of the longitudinally disposed bracing and interconnecting members.

Referring in detail to the drawings, particularly, to the form of invention shown in Figure 1 thereof, the invention, generally stated, comprises relatively longitudinally spaced and opposed supporting leg assemblies designated by the numerals 1 and 1' interconnected in fixed relation by longitudinally disposed elongated tubes 2. The upper ends of the spaced leg assemblies receive and support thereon a table top 3 which can be of the longitudinally extendable type, well known in the art.

The supporting legs constituting the assemblies 1 and 1', and the elongated tubes 2, are, preferably though not necessarily, made of metal tubing whose surfaces may be coated or otherwise finished, as desired.

Inasmuch as the supporting leg assemblies 1 and 1' are complemental in construction, shape and size, but one thereof is described in detail, such description, of course, sufficing for both.

The supporting leg assembly consists of a pair of juxtaposed and opposed correspondingly curved and sized tubular legs 4 and 4', each having flattened upper end table top attaching portions 5 and 5', and flattened or otherwise formed lower ends or feet 6 and 6'. Bolts 7 engaging appropriate portions of the frame of the table top 3, are received by and connected to the attaching portions 5 and 5'. Thereby, said top frame is fixedly secured to and on the longitudinally spaced supporting leg assemblies 1 and 1'.

Adjacent intermediate side portions of the juxtaposed tubular legs of the assembly have transversely opposed and horizontally aligned openings 8 therein, while other and smaller co-axially disposed openings 9 are formed in the respective outer sides of said intermediate portions, the purpose of which will be presently described.

The longitudinally disposed elongated tubes 2 are positioned in vertically spaced parallelism, as

shown in Figures 1, 3 and 4 of the drawings, and their opposite end portions are arranged and extended between the adjacent sides of the opposed tubular legs 4 and 4' of the assemblies 1 and 1'. Said end portions are snugly received and seated in the horizontally aligned openings 8 in the inner sides of the tubular legs, in the manner shown in Figures 3 and 5, and each have transverse co-axially aligned openings 10 in the same. Bolts 11 are passed through the juxtaposed supporting legs 4 and 4' and the seated end portions of the elongated tubes 2, via the openings 8, 9 and 10, respectively, therein. Cap-nuts 12 are turned onto the extended screw-threaded ends of the bolts into bearing engagement with adjacent outer side portions of said supporting legs which, if desired, may be flattened, as at 13, to ensure flush bearing contact. Thus, it is seen that the supporting legs 4 and 4', and the inter-engaged end portions of the elongated tubes 2 are firmly and securely clamped together in the described assembled relation. Obviously, vertical displacement of the elongated tubes from between the supporting leg assembly, with the application of load or stress thereto, will be positively prevented. At the same time, said end portions of these elongated tubes, being seatingly engaged with and between the juxtaposed and opposed supporting legs 4 and 4', will provide a firm and effectual bed or support for the latter, preventing any possibility of relative movement, shifting, vibratory or otherwise therebetween, and ensuring their permanent cooperative positioning with respect to the table top 3.

The extended outer ends of the elongated tubes 2 are open, as shown in Figures 4 and 5, and plates or anchors 14 having screw-threaded coaxially disposed openings therethrough, are fixedly positioned within the same by spot-welding 15, or other means.

At end supporting leg 16, curved in a manner to substantially correspond to the transversely opposed supporting legs 4 and 4', having appropriately vertically spaced openings 17 formed in the inner side of its intermediate portion, is provided to the assembly. It is to be noted that the diameters of the openings 17 substantially correspond to the outside diameters of the extended ends of the elongated tubes 2, and are adapted to receive the same therethrough. Hence, as shown in Figures 4 and 5 of the drawings, the intermediate portion of the curved end leg 16, will have capping-like engagement with and over said extended ends. To secure this end leg in assembled relation to the curved supporting legs 4 and 4', and prevent its displacement or movement with relation to the cappingly engaged extended ends of the elongated tubes 2, I may and preferably do form smaller and counter-sunk openings in adjacent portions of the outer side of the end leg and engage therethrough connecting screws 18, the inner screw-threaded shanks of which are threadedly engaged with and through the screw-threaded openings in said plates or anchors 14, with the connecting screw heads flushly seated in said counter-sunk outer side provided openings, for obvious reasons.

A supporting leg assembly constructed in the manner hereinbefore described, provides a trilegged support, the legs of which will be arranged at substantially right angles with relation to each other; the opposed supporting legs 4 and 4' being disposed transversely with respect to the table top 3, and the end leg 16 being disposed substantially longitudinally and outwardly with respect to said

table top 3 (see Figures 1 and 2). In consequence, the over-all table assembly comprising the supporting leg assemblies 1 and 1', the elongated tubes, and the table top 3, will be enabled to firmly resist transverse and/or longitudinal tipping or tilting.

Since the flattened upper end table top attaching portions 5 and 5' are connected to the frame of the table top 3, and afford a firm and secure support therefor, I prefer that the end leg 16 of each of the assemblies 1 and 1', shall have its upper end terminated at a point below the table top frame, in the manner well shown in Figures 1 and 2. For purposes of finish and/or ornamentality, this upper end of the end supporting leg 16 may be closed, as indicated at 19.

In some types or characters of tables, etc., it may be desirable to dispense with the curved end supporting leg or legs 16 in the supporting assemblies 1 and 1', above described. This may be especially advantageous when smaller and/or shorter table tops, etc., are to be supported and wherein the chances of endwise tipping or tilting thereof are materially less. Therefore, in Figures 6 and 7 of the accompanying drawings, I have shown a modified form of the invention, which utilizes only the legs 4 and 4' of the respective supporting leg assemblies 1 and 1'. Herein, curved supporting leg assemblies 1*a* and 1*b*, including only the transversely opposed supporting legs and excluding the end legs, such as respectively designated by the reference numerals 4 and 4', and 16, in the preceding form of my invention, are provided. The upper ends of these transversely opposed supporting legs are connected to appropriate portions of the frame of a table top 3', as at 7', all as hereinbefore specifically described.

The extended opposite and open ends of the table top longitudinally disposed elongated tubes 2, are preferably closed by either ornamental or strictly utility caps 20, one of each being snugly engaged over said elongated tube open ends in the Figure 7, and secured in position by passing suitable screws 21 therethrough into threaded engagement with the internal anchors 14 in said tube ends.

From the foregoing, it will be understood and appreciated by workers skilled in this particular art, that I have provided a type of table base or bases which, when operatively assembled and attached or connected to a table top, etc., will afford a dependable and entirely sturdy support for the same, free of objectionable vibratory movement or any other movement making for insecurity. Additionally, the component members of my improved table top base assemblies are capable, by reason of their simple and rugged constructions, of withstanding great stress and wear. Also, by reason of their construction and formation, they may be most conveniently packed in limited shipping area or space in knocked-down form.

Assembly of the improved bases can, obviously, be satisfactorily effected by unskilled labor and without the need of special assembling equipment or tools.

I claim:

1. A supporting base of the character described, comprising longitudinally spaced leg assemblies, each including relatively opposed inwardly bowed tubular supporting legs, the intermediate bowed portions of the tubular legs of said leg assemblies being arranged in spaced juxtaposed relation, the inner sides of the spaced juxtaposed portions of the tubular legs having relatively vertically

spaced openings formed therein and the openings in one of said tubular legs of said leg assemblies being horizontally aligned with the openings in the opposed tubular leg thereof, relatively vertically spaced tubular bodies arranged intermediately of said leg assemblies having their opposite end portions nestingly engaged in the horizontally aligned openings in the inner sides of the tubular legs of said leg assemblies and extending outwardly of and beyond said legs, retaining the intermediate bowed portions of the legs in said spaced juxtaposed relation, and connecting means passed through said intermediate bowed portions and the inner side openings therein and adjacent end portions of said tubular bodies fixedly interconnecting the same.

2. A supporting base of the character described, comprising spaced leg assemblies, each assembly including opposed inwardly bowed tubular supporting legs and a right angularly disposed inwardly bowed tubular leg, the intermediate bowed portions of the opposed tubular legs of each assembly being arranged in spaced juxtaposed relation, the inner sides of the spaced juxtaposed portions of the opposed tubular legs having relatively vertically spaced openings formed therein and the openings in one of said tubular legs of said leg assemblies being horizontally aligned with the openings in the opposed tubular leg thereof, relatively vertically spaced tubular bodies arranged intermediately of said leg assemblies having their opposite end portions nestingly engaged in the horizontally aligned openings in the inner sides of the opposed tubular legs of said leg assemblies and extending outwardly of and beyond the opposed legs retaining the intermediate bowed portions of the legs in said spaced juxtaposed relation, connecting means passing through

said intermediate bowed portions and said inner side openings of said legs and through adjacent end portions of said tubular bodies fixedly interconnecting the same, said right angularly disposed tubular supporting leg of each assembly having spaced openings formed in the inner side thereof snugly receiving the adjacent extended end portions of the tubular bodies therein, the intermediate bowed portions of said right angularly disposed tubular legs being adjacent to portions of the opposed inwardly bowed tubular supporting legs of said assemblies, and means engaged through each of said right angularly disposed tubular supporting legs connecting the same to the ends of said tubular bodies snugly engaged in said spaced openings therein.

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