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[54] **COMPOSABLE UNIT BASE FOR FURNITURE**

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[58] **Field of Search** 248/188.7, 188.1, 158, 248/159

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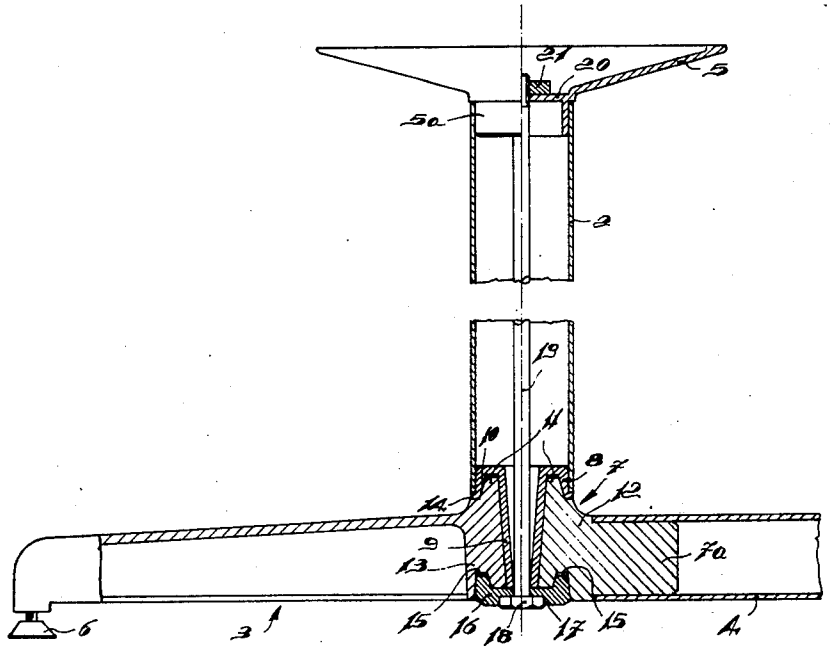
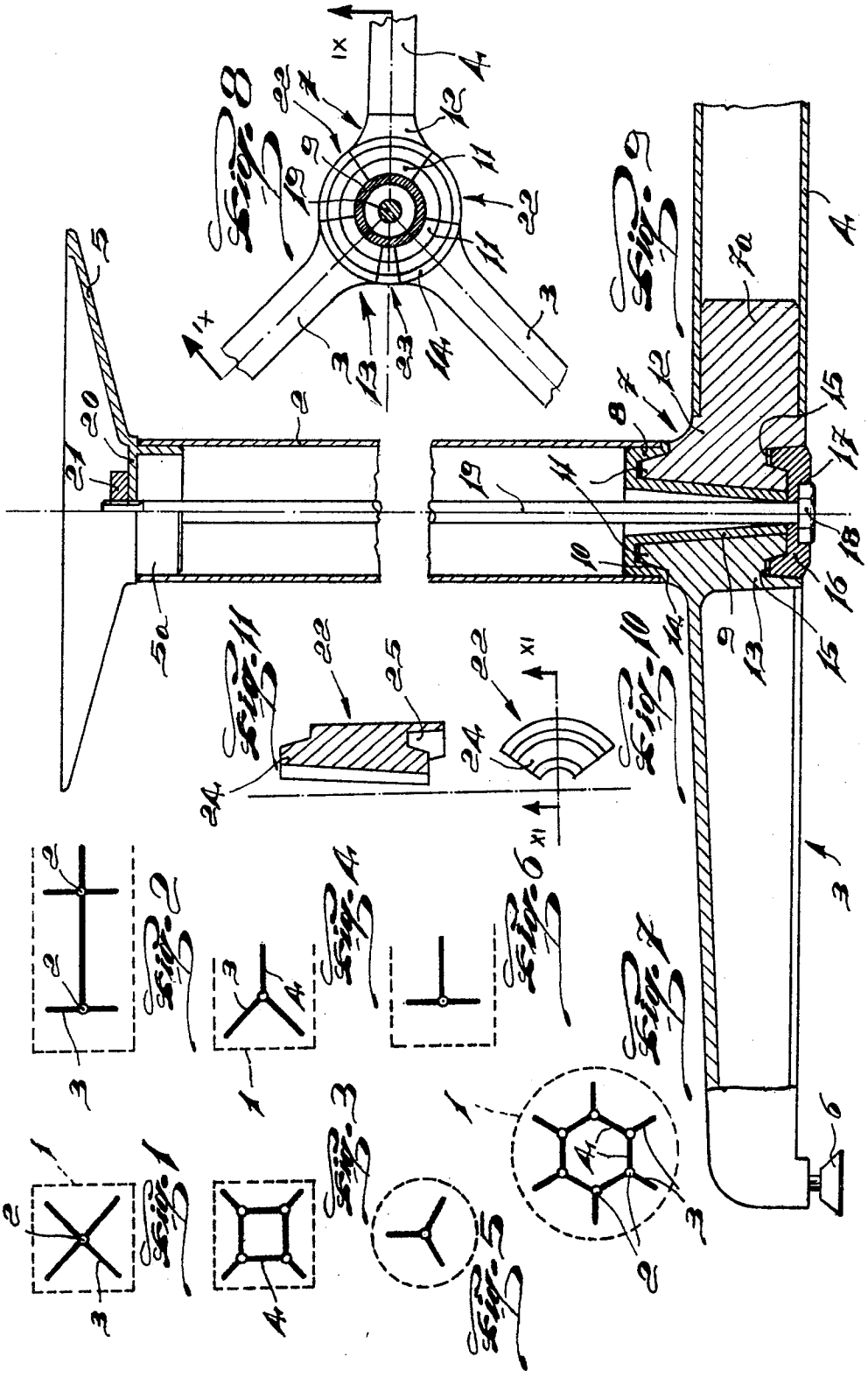
[57] **ABSTRACT**

A composable unit base for furniture comprising a column and a plurality of elements extending radially from the lower end of the column. Each of the radial elementts has an end in the form of a crown sector which comprises, upperly a tapered projection and at the lower side a groove, as means for the engagement with the column. Said sectors are inserted between disc elements provided at the lower end of the column and are locked in this arrangement by means of a tie rod.

3 Claims, 11 Drawing Figures





COMPOSABLE UNIT BASE FOR FURNITURE

BACKGROUND OF THE INVENTION

This invention relates to a composable unit base for furniture of the type comprising a column from the lower end of which extends radially a plurality of elements which form the support feet for the piece of furniture and/or the connection stringers to another column.

The angular disposition and number of radial elements of a column base of the aforementioned type are notably chosen in consideration of aesthetic requirements, according to the shape and size of the piece of furniture. These bases are specially constructed for a specific use and therefore cannot be adapted to different uses.

SUMMARY OF THE INVENTION

The object of the present invention is consequently to provide a base adaptable to different dimensions and shapes of furniture, which is of simple and economical structure.

The aforementioned object is obtained by a composable unit base for furniture comprising a plurality of elements extending radially from the lower end of a column, in which the end by which each of said radial elements is fixed to the column is in the form of a crown sector which on its upper and lower ends comprises means for frontal insertion coupling with respective disc elements opposing said ends, of which the upper disc element is fixed to the lower end of the column, there being provided a tie rod extending axially through said disc elements, and arranged to lock said sectors between said disc elements.

BRIEF DESCRIPTION OF THE DRAWINGS

Further details of the invention will be more evident from the description of some embodiments illustrated by way of example in the accompanying drawing in which:

FIGS. 1 to 7 are plan views of compositional arrangements of the base according to the invention;

FIG. 8 is a plan view of part of the base according to the arrangement of FIG. 4;

FIG. 9 is a vertical section through the base on the line IX—IX of FIG. 8;

FIG. 10 is a plan view of a detail of the base, and

FIG. 11 is a section on the line XI—XI of FIG. 10.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With particular reference to FIGS. 1 to 7, it can be seen that, depending upon the overall size of the table surfaces 1, their base consists of one or more columns 2, from the lower end of which radial elements or arms 3 and 4 extend in ray formation. The elements 3 form the feet of the base, whereas the elements 4 form the connection stringers between the columns 2. The angles between the elements 3 and 4 of each column are different, according to the case under consideration.

FIGS. 8 to 11 show that each column 2 consists of a metal tube, preferably of light alloy and of circular cross-section. In the upper end of each column is inserted the boss 5*a* of an inverted cap element 5. The boss 5*a* is fixed to the column 2 by way of suitable glues. The cap 5 defines upperly the support member on which the table top 1 will be fixed. In the outer ends

of the elements 3, which are also of metal, threaded seats are provided open downwards, into which are screwed the threaded shanks of adjustable feet 6 by means of which the table rests on the ground. The stringer 4 consists of a metal tube into the inner end close to the column 2 of which is inserted and glued the tongue 7a of a terminal piece 7 by which the stringer is locked in the required angular position at the lower end of the column 2. The fixing to the column 2 of the elements 3 is also carried out by means of a piece similar to that indicated by the reference numeral 7.

Into the lower end of each column 2 is inserted and glued a disc element which comprises a peripheral flange 8 projecting downwards and a conical sleeve 9, coaxial with the column 2 and converging downwards. On the lower face of the disc an annular groove 10 is formed which is flared downwards and into which, in determined angular positions, are inserted projections 11 on the upper side of the terminal part 12 of the piece 7 of the stringer 4 and on the terminal parts 13 of the feet 3. The parts 12, 13 are laterally defined by radial surfaces converging toward the axis of the column and internally by a conical surface. The internal surfaces of the internal surface which is complimentary to the external surface of the conical sleeve 9. The projections 11 extend concentrically with the axis of the sleeve 9 for an angle equal to that of the parts 12, 13 and have the same taper as the annular groove 10.

Outside the projections 11 of the parts 12 and 13 there extends a flattened zone 14 which acts as a rest for the lower edge of the flange 8, and this edge forms a peripheral step which abuts against the lower edge of the column 2. The parts 12 and 13 comprise lowerly a groove 15 coaxial with the sleeve 9, the inner and outer walls of which converge upwards. In these grooves there is inserted the upwardly extending rim of a disc 16. The inner and outer faces of this rim have a taper which is complementary to that of the grooves 15, and the lower side of the disc 16 is centrally undercut to provide a cavity 17 which by way of a bore in the disc is in communication with the inside of the sleeve 9. In the cavity 17 is situated the head 18 of a tie rod 19 which extends through the sleeve 9 axially along the column 2 and then traverses a central bore in the diaphragm 20 of the cap 5. The upper end of the tie rod comprises a threaded portion on which the nut 21 is screwed. As can be seen, the parts 12, 13 and their projections 11 and grooves 15 form means of frontal insertion coupling with the flange 8 and disc 16. As the nut 21 is tightened, the tie rod clamps the rim of the disc 16 in the grooves 15 of the parts 12 and 13, so determining the penetration of the projections 11 into the groove 10 of the flange 8 and hence locking the elements 3, 4 to the column 2. Depending upon the angular position of the elements 3, 4, spaces remain between the parts 12, 13 of variable angular width. These spaces are closed by suitable sleeve sectors which in FIGS. 8, 10 and 11 are indicated by the reference numerals 22 and 23. Each sector have a shape equal to that of the parts 12 and 13, and its upper projection and its lower groove equal to those indicated by the reference numerals 11 and 15 are indicated by the reference numerals 24 and 25. In this manner the sectors are clamped between the disc 16 and flange 8 in a manner similar to the parts 12, 13. The external surface of the sectors 22 and 23 is cylindrical and of the same radius as that of the column 2 and their internal surface has

the same conicity as that of the internal surface of the parts **12,13** thus forming a central passage tapered downwardly and complementary to the conical sleeve **9** introduced therein. Advantageously, the sectors **22** and **23** are formed of plastics material metallized on the exposed surface.

I claim:

1. Composable unit base for furniture, comprising a plurality of arms radially arranged with respect to a column and means for fixing the inner ends of said arms to the lower end of said column, said means including a projection provided at the inner end of each arm and extending upwardly from the upper side thereof, a groove formed at in the lower side of said arm end, an upper disc element fixed at the lower end of the column and engaged by said projection and a lower disc element engaging said groove, means for clamping said arm ends between said disc elements, wherein according to the improvement each inner arm end is laterally defined by two flat radial surfaces which converge towards the axis of the column and between which said

projection and said groove extend concentrically to said axis, sleeve sector elements being further provided which are arranged between the inner ends of adjacent arms to fill the space therebetween and clamped between said disc elements.

2. Composable unit base as claimed in claim **1** wherein each sleeve sector element comprises an upper projection and a lower groove extending concentrically to the axis of the column for engagement with said upper and lower disc elements, said sector element being defined by two radial surfaces including an angle equal to the angle included by the opposite surfaces of adjacent arm ends.

3. Composable unit base as claimed in claim **1** wherein the radially arranged arm ends and sectors define a central passage coaxial to the column and having a conical surface tapered downwardly and engaged by a conical sleeve projecting into said passage and integral with the upper disc element.

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