United States Patent [19]

Bolyos

[11] **3,758,181**

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[54] **PEDESTAL SYSTEM FOR TABLES, BOOKSHELVES, SHOP FURNISHINGS AND THE LIKE**

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[52] **U.S. Cl.** **312/107**

[51] **Int. Cl.** **A47b 77/00**

[58] **Field of Search** 312/107, 108, 111

[56] **References Cited**

UNITED STATES PATENTS

1,321,097	11/1919	Gonzalez	312/107 UX
2,511,949	6/1950	Simon	312/107
3,529,878	9/1970	Blowers	312/107
3,563,624	2/1971	Stice	312/111
3,644,008	2/1972	Overby	312/107

FOREIGN PATENTS OR APPLICATIONS

168,273	5/1951	Austria	312/107
254,759	2/1949	Switzerland	312/107

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[57] **ABSTRACT**

A modular pedestal construction composed of a plurality of like modules which may be stacked and/or disposed laterally adjacent one another to form a unit. Each module comprises a bottomless box frame of square horizontal cross section with thin side walls and peripherally extending shoulders having abutment surfaces whose width is equal to the thickness of the side walls so that the module frames may be stacked while their side walls are flush with each other. A thin-walled bottom plate of the same square cross section closes off each bottom module of the unit, each bottom plate having peripherally extending shoulders having abutment surfaces whose width is equal to the thickness of the side walls.

3 Claims, 10 Drawing Figures

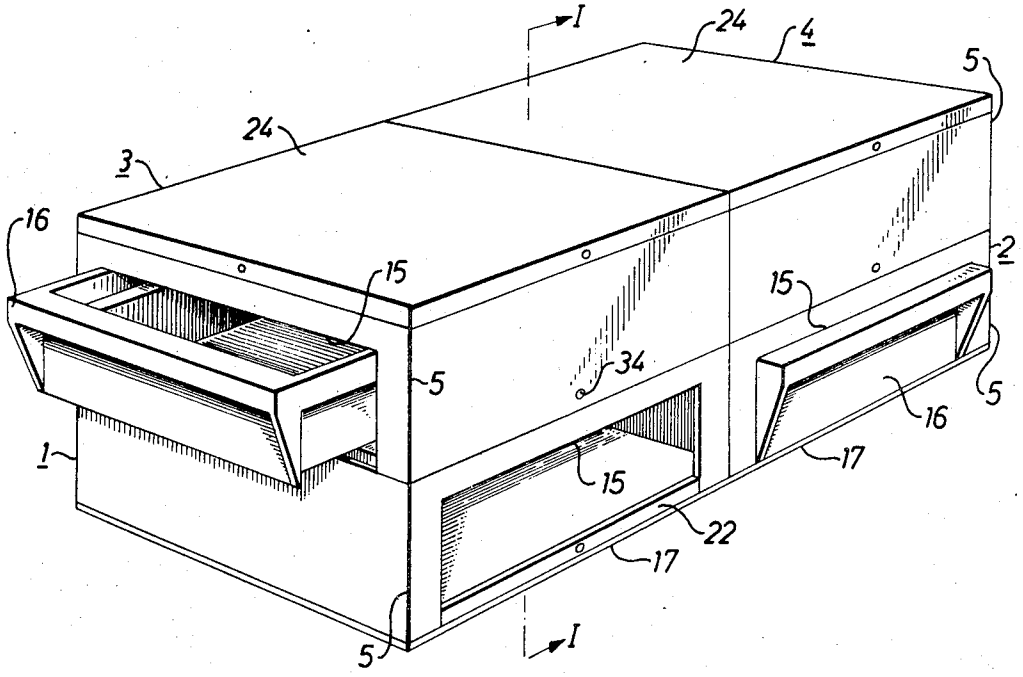
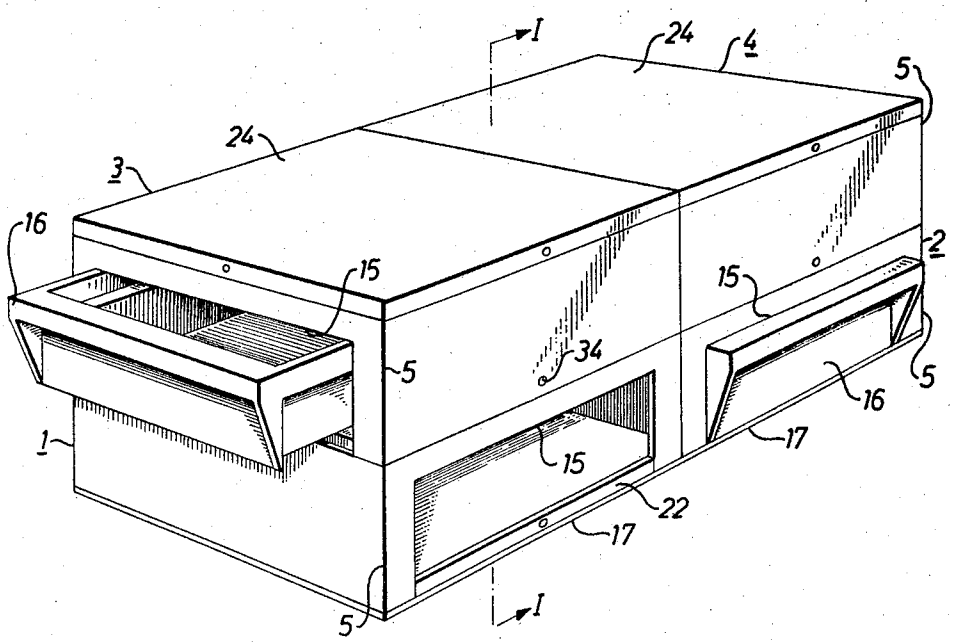


Fig. 1



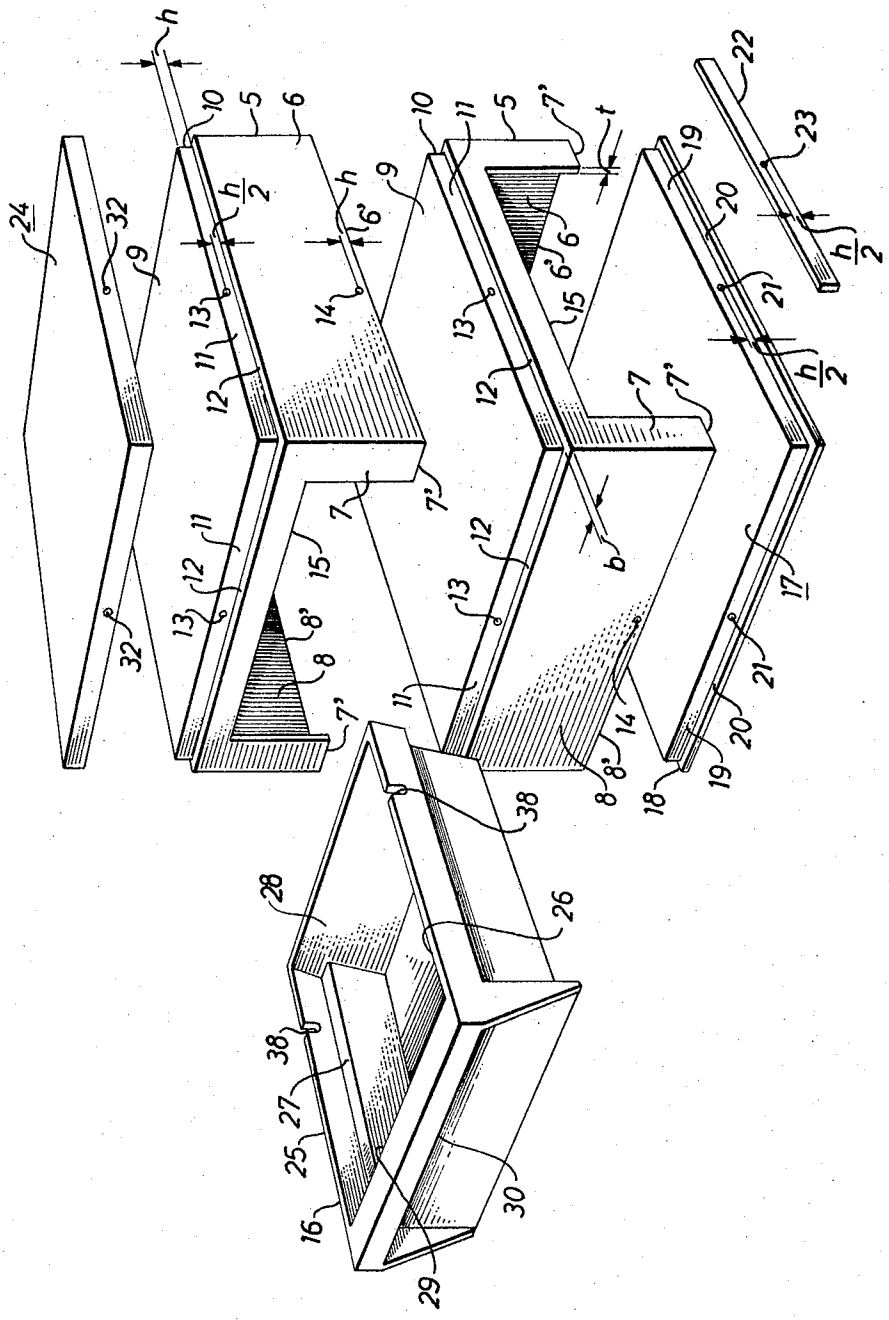

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Fig. 2

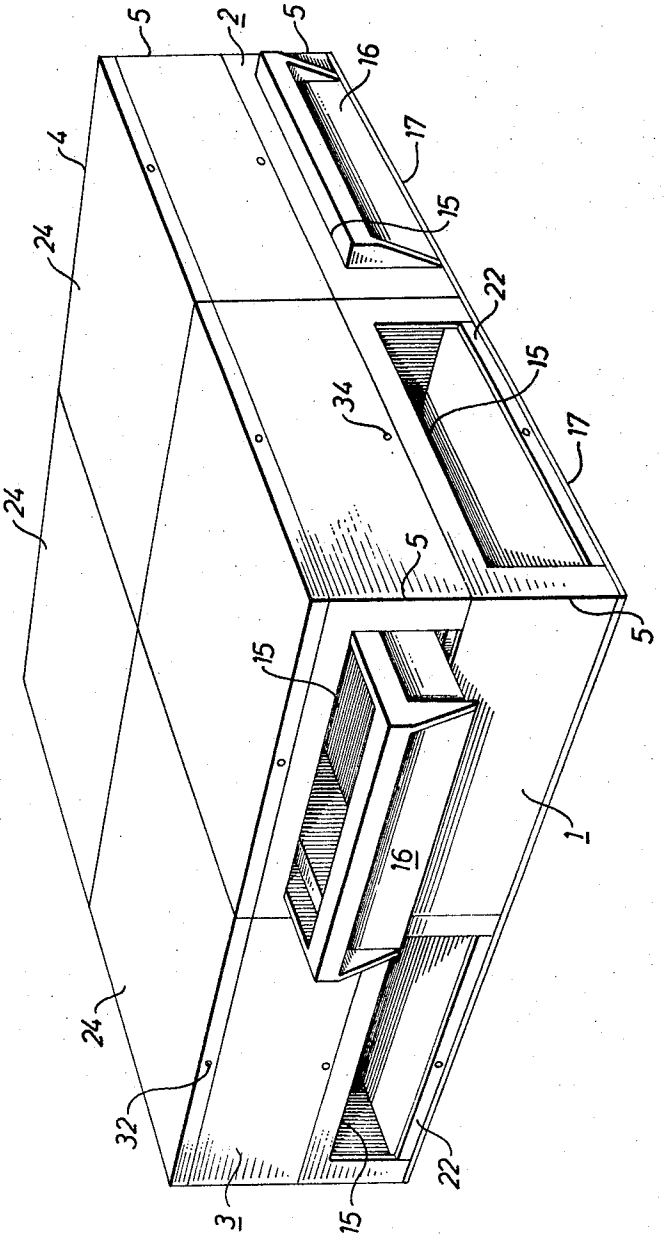


Fig. 3

Fig. 4

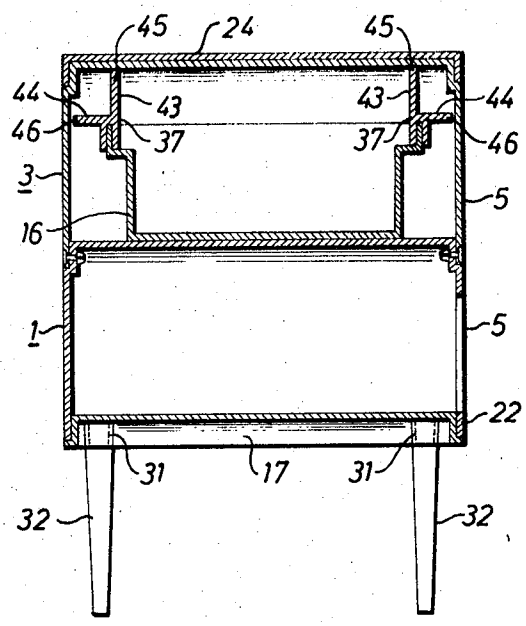

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Fig. 5

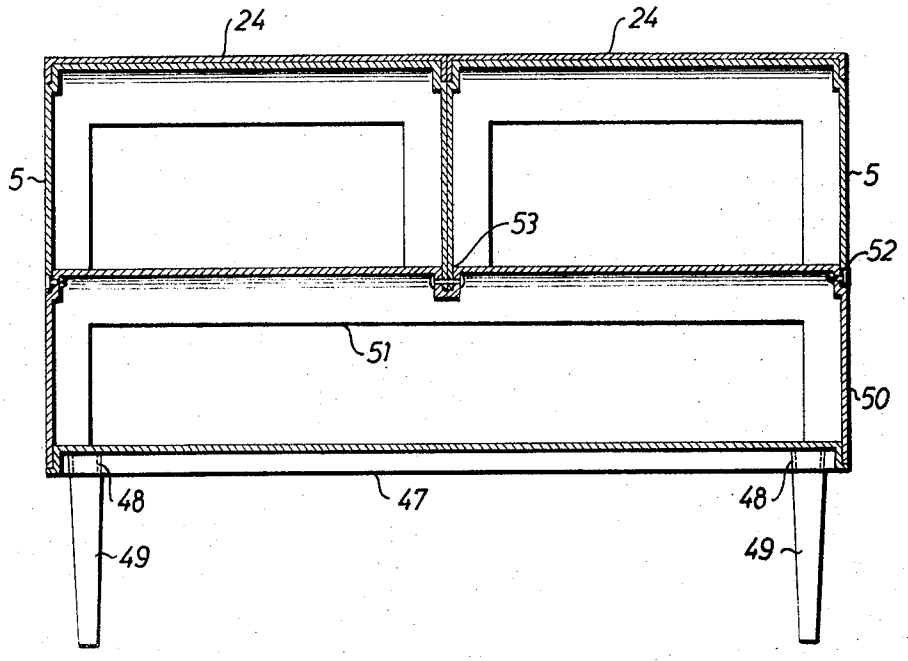

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Fig. 6

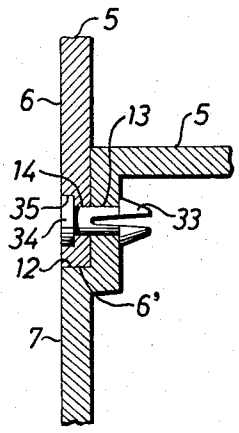


Fig. 7

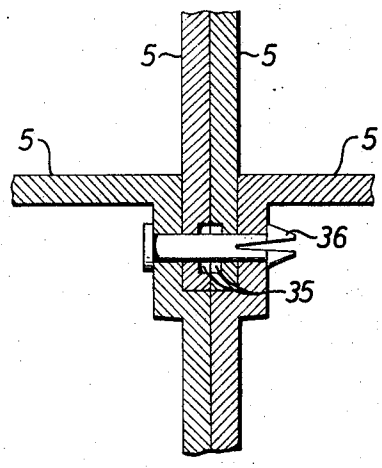


Fig. 8

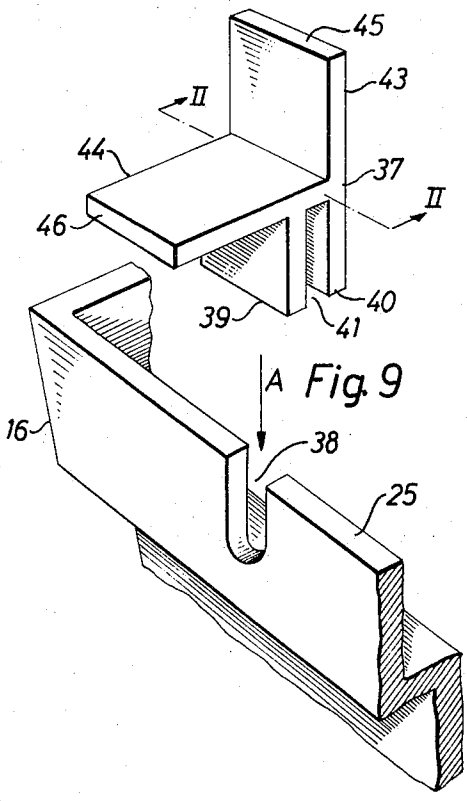
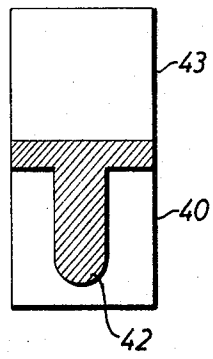


Fig. 9

Fig. 10



PEDESTAL SYSTEM FOR TABLES, BOOKSHELVES, SHOP FURNISHINGS AND THE LIKE

The present invention refers to a pedestal system for tables, bookshelves, shop furnishings and the like.

The present invention relates to a pedestal system or the like, particularly for furniture, such as bookshelves, shop furnishings, writing tables and the like, provided with storage spaces, and the construction units from which the pedestal system is constructed.

It is already known within this field to produce variable combinations from mass produced construction elements which can be mounted adjacent to each other or on top of one another, either loosely or by means of suitable attachment means, which combinations can be adjusted to the requirements of the place in which they are to be used and assembled thereat. This concept is directed to the possibility of variation, although the objects hither to placed on the market have been particularly directed to special areas, for example, bookshelves, double combinations, storage room installations etc. In other words, one object or series of objects is adapted to and intended for a particular purpose and, as a result hereof, the number of possible combinations is restricted.

The object of the present invention is to provide a pedestal system comprised of a relatively small number of construction units designed for massproduction in very large series and which pedestal system has a large number of combination possibilities and includes storage spaces which can be arranged both with and without draws according to requirements.

The invention is mainly characterized in that the system is composed of mutually similar construction parts which are polygonal when seen in horizontal section and which can be mounted in superposed relationship or contiguous relationship and have adjacently lying edge surfaces of the constructing members lying in the same plane and can be joined together by means of attachment means to form a unit, the construction members when assembling the units being mounted on or adjacent to an adjacent construction member in arbitrarily selected positions which are mutually displaced in relation to each other at an angle which corresponds to the angle between the surfaces forming the polygonal configuration.

The invention will now be described with reference to an embodiment thereof illustrated in the accompanying drawings, in which

FIG. 1 illustrates in perspective a pedestal system comprising four construction units, each construction unit comprising a number of parts or members which can be joined together by means of securing members.

FIG. 2 is a perspective, exploded view showing the construction parts of an upper and a lower construction unit and a drawer constructed as a sliding drawer in connection with the embodiment of FIG. 1.

FIG. 3 illustrates construction units for constructing a table structure.

FIG. 4 is a sectional view taken through the line I—I of the embodiment of FIG. 1, and illustrating how legs can be mounted to the pedestal system.

FIG. 5 illustrates in section an alternative embodiment of the invention, with which a support structure is mounted on legs with a construction unit having the same width as the construction units according to

FIGS. 1–3 but being twice the length arranged on the support structure, and having two construction units according to the embodiments of FIGS. 1–3 arranged above said first mentioned construction unit.

FIGS. 6 and 7 illustrate embodiments of means for securing the construction units.

FIGS. 8 and 9 illustrate means for guiding a sliding drawer in the pedestal systems of FIGS. 1–5 in parallel movement.

FIG. 10 is a section view taken through the line II—II of the embodiment of FIG. 8.

With reference to the drawings, FIG. 1 illustrates a pedestal system comprised of four construction units generally shown at **1, 2, 3, 4.** Each construction unit has a construction member provided with a frame **5.** All frames **5** are identical and in the form of a substantially thin-walled, bottomless fox of square configuration, when seen in horizontal section, and having four flat side walls of which side walls **6, 7, 8** can be seen in FIG. 2 and one of which is not shown. The side walls **6, 7, 8** have bottom edge surfaces **6', 7', 8'.** The frames **5** have a roof member **9** (FIG. 2) which is formed integrally with all four side walls. At the junction between the roof structure **9** and each side wall is arranged a shoulder **10** having abutment surfaces **11, 12** (FIG. 2). All abutment surfaces **11** and **12** have the same height *h* and width *b*, the width *b* of the abutment surfaces **12** being equal to the wall thickness *t* of the side walls, this thickness being substantially the same for all walls. Each abutment surface **11** has disposed therein equidistant from the side walls extending angularly thereto a throughpassing hole **13** at approximately half the height *h*/2 of the abutment surfaces **11** and arranged at the bottom edge of each side wall vertically beneath the hole **13** is a hole **14** whose height *h*/2 from the bottom edge of the side wall is the same as the height of the hole **13** above the abutment surfaces **12.**

At least one of the side walls of the frames **5** may be provided with a recess **15,** which serves either as an opening in which a sliding drawer **16** can be accomodated or, quite generally, as an opening to the inner space formed by the frame **15.**

FIG. 2 also illustrates a bottom plate member **17** having the same square horizontal section as the frame **5** and a shoulder **18** extending along all edge surfaces and having two abutment surfaces **19,20** which correspond exactly to the previously described abutment surfaces **11** and **12** respectively. As with the abutment surfaces **11,** the abutment surfaces **19** are also provided with a through passing hole **21.**

As will be seen from FIG. **2,** the illustrated embodiment has a slat **22** with a centrally positioned throughpassing hole **23.** The length of the slat **22** corresponds to the width of the recess **15.** The purpose of the slat will be explained hereinafter. The illustrated embodiment is also provided with a cover member **24** having the same square horizontal section as the frame **5.** The cover member **24** has the form of a lid with an internal profile which coresponds exactly to the shoulder **10** on the frame **5.**

The sliding drawer **16** is constructed to fit along the recess **15** and has side walls **25, 26** which are suitably strengthened by means of an internally mounted buttress. The sliding drawing **16** is also provided with a rear side wall **28** which is suitably flat and arranged to slope inwardly and downwardly, and a front side wall **29** which may be provided with a handle or the like **30**

which is suitably integral with the remaining parts of the drawer.

FIG. 1 illustrates how the described construction components can be formed into a pedestal system. As previously mentioned, the pedestal system of FIG. 1 is comprised of four units 1–4, the lower units 1, 2 each comprising a frame 5 and a bottom plate 17, FIG. 2. The unit 2 (FIG. 1) is also provided with a sliding drawer 16 while the other unit 1 is empty and the recess 15 exposed, thereby enabling the inner space in the unit 1 to be accessible from without. The slat 22 is used to fill the portion of the shoulder 10 on the bottom plate 17 of unit 1 which is not covered by any of the side surfaces on the frame 5.

The units 3, 4 with frames 5 are mounted on the units 1, 2, the openings of the frames being selectively turned to face in the desired direction. The unit 3 is illustrated in FIG. 1 with a sliding drawer 16 and a side wall of the pedestal system, while on the other hand the frame 5 of the unit 4 is turned so as to hide the opening 15.

Mounted above each unit 3, 4 is a cover member 24, two cover members 24 together forming a flat top surface of the pedestal system. As will be seen from FIG. 3, in certain instances it may be suitable to arrange a further four units so that together with the units shown in FIGS. 1 and 2 a square structure can be formed in which the four cover members 24 form the surface of a table.

FIG. 4 illustrates a section of a pedestal system according to FIG. 1 taken through the line I—I therein. As will be seen from FIG. 4, the bottom plate 17 may be arranged with attachment members 31 for legs 32, the attachment members being, for example, in the form of sockets with one such attachment member being arranged adjacent each of the four corners of the bottom plate 17. FIG. 4 also illustrates a method of assembling the different construction members, although the method of assembly is illustrated in more detail in FIGS. 6 and 7. It will be evident from the aforegoing that the described through passing holes 13, 14 in the frames 5, the holes 21 in the bottom plate 17 and through passing holes 32 arranged in a corresponding manner in the edge surfaces of the cover members 24 are positioned such that when the components are put together in the manner shown in FIGS. 1–3, the openings of associating and adjacently positioned construction members are in register with each other. FIG. 6 illustrates by way of example a joint between two side walls 6, 7 of two frames 5. When the edge surface 6' of the upper wall 6 abuts the abutment surface 12 of the lower wall 7, the hole 14 in the upper wall 6 will be in register with the hole 13 in the lower wall 7. A double headed rivet 33 of adjusted length can be inserted through the holes 13, 14. The rivet 33 is suitably made of elastic material and may be split along part of its length, thereby enabling the outwardly biased ends to be brought together by means of a small force to permit the rivet to be inserted through the holes 13,14. As will be seen from FIG. 6, the outwardly facing head 34 of the rivet should suitably be seated in a countersink 35 disposed in the side wall 6, so that the outer surface of the wall 6 is perfectly flat subsequent to placing the rivet 33 into position.

FIG. 7 illustrates the manner in which four adjacently lying frames 5 are assembled. In this instance a rivet 36 is used whose length between the rivet heads is twice that of the length of the corresponding portion of the rivet 33.

In the illustrated embodiment, the aforementioned slat 22 with the hole 23 is secured to a bottom plate 17 with a rivet inserted through the holes 21 (FIG. 6).

It will be readily understood from the aforegoing, that all joints between the different construction members can be readily obtained by the rivets 33,36 and that the construction components can be readily dismantled by removing the rivets. Moreover, by means of described method of assembly, the various construction components can be rapidly and easily changed from one combination to another.

The embodiment of FIG. 4 is also provided with a member 37 for guiding the drawer 16 for parallel movement. The member 37 is also shown in perspective in FIG. 8 and in section along the line II—II in FIG. 10. The member 37 is arranged to be placed in a recess 38 located on each of the side walls 25, 26 and at the rear end thereof as illustrated in FIGS. 2 and 9. The member 37 is provided with downwardly extending legs 39 and 40, between which is formed a slot 41 having a width equal to the thickness of the walls 25, 26. A centre portion of the slot 41 is filled with an intermediate portion 42 (FIG. 10) which connects the two legs 39, 40 together. The intermediate portion 42 is arranged to fit the recess 38. The member 37 is also provided with an upwardly projecting portion 43 and a laterally outwardly projecting portion 44. The portions 43, 44 are constructed so that when the member 37 is mounted on one of the side walls 25, 26 of the drawer 16 with the intermediate portion 42 pressed down into the recess 38 the end surfaces 45, 46 of the portions lie immediately adjacent corresponding inner walls of the frame 5. Thus, in this way, there is provided an effective guide for parallel movement of the drawer 16.

FIG. 5 illustrates a variant of the pedestal system according to the invention, having a bottom plate 47 of the same width as the length of one side of the frame 5 and a length which is exactly twice as long. Similarly to the bottom plate 17, FIG. 4, the bottom plate 47 is arranged with an attachment member 48 at each corner for legs 49. In the embodiment of FIG. 5, there is arranged above the bottom plate 47 a construction member 50 which has the same rectangular peripheral measurements as the bottom plate 47. The side walls on the construction member 50 may be provided with a recess 51, thereby enabling the inner space of the construction member 50 to be accessible from without. Additionally, the construction member 50 is provided at its upper edge surface with a circumferentially extending shoulder 52 and a centrally arranged groove 53 having a depth which corresponds to the height of the abutment surface 11, FIG. 2, and a width which is equal to twice the width t of the side walls 6–8 of the frame 5.

Thus, as illustrated in FIG. 5, the construction member 50 may be mounted to the bottom plate 47, whereafter frames 5 may be arranged on and adjoined to the construction member 50. Cover members 24 may then be mounted on top of the frames 5.

As will be evident from the aforegoing, the pedestal system according to the invention may be assembled in a practically unlimited number of forms suited for present requirement using a small number of mutually similar components, and can be assembled to form a stable integral unit. The unit can also be dismantled rapidly

and easily when required, and rebuilt to form one or more new units.

Each construction member is formed to render it suitable for extrusion molding or compression moulding in extended series, a plastics material suitably being used.

By colouring the plastics material before extruding or molding, it is possible to colour the various construction members directly in different colours, thereby rendering any form of painting superfluous, which adds to the economic advantages aforded by the present invention.

I claim:

1. A modular pedestal construction composed of a plurality of like modules, each of the modules comprising a bottomless box frame of square horizontal cross section having relatively thin side walls and peripherally extending shoulders having abutment surfaces whose width is equal to the thickness of the side walls, said like modules being capable of assembly into a pedestal unit by disposing the modules laterally and vertically adjacent one another, the side walls of vertically superposed ones of the modules engaging the abutment surfaces of lower ones of the modules so that all side walls are flush with each other, and a bottom plate of the same square cross section closing off each of the bottomless box frames of bottom ones of the pedestal unit, each of the bottom plates having peripherally extending shoulders having abutment surfaces whose width is equal to the thickness of the side walls.

2. The modular pedestal construction of claim 1, wherein at least one of the side walls defines a recess.

3. The modular pedestal construction of claim 1, further comprising a cover member of the same square cross section having peripherally extending flanges whose width is equal to the thickness of the abutment surfaces whereby the flanges are flush with the side walls.

* * * * *