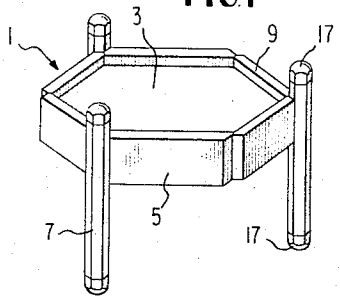
Oct. 17, 1967 N. KHATTAR 3,347,186

NESTABLE SUPPORTS

Filed March 24, 1966

FIG.1



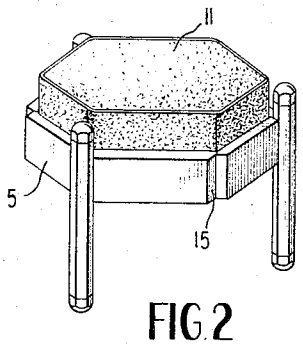


FIG.2

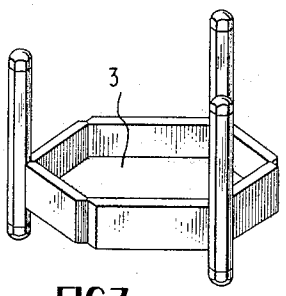
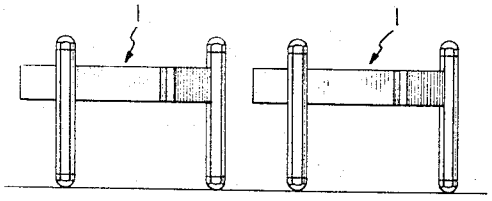


FIG.3

FIG.4



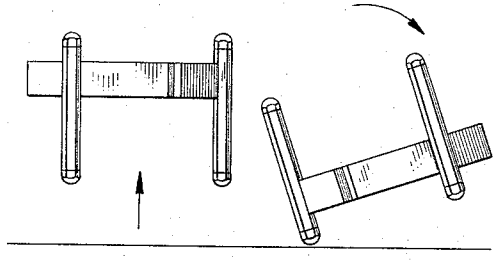


FIG.5

FIG.6

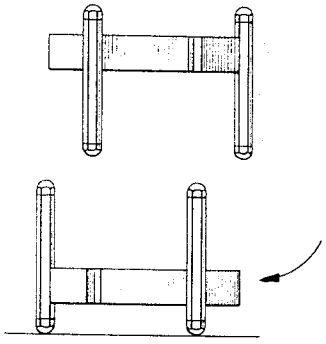


FIG.7

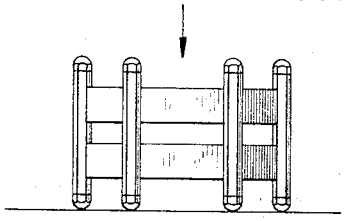
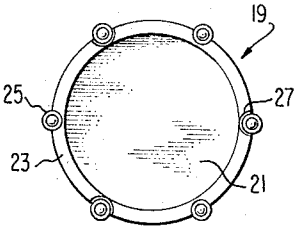


FIG.8



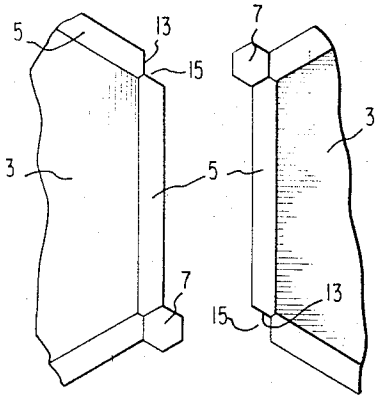


FIG.9

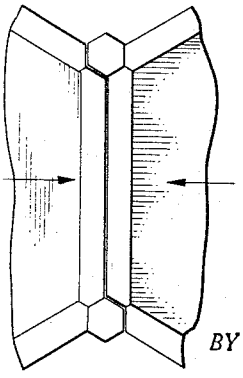


FIG.10

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NESTABLE SUPPORTS

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ABSTRACT OF THE DISCLOSURE

A support has a platform supported by at least three legs and a recess between each adjacent pair of legs, the legs and recesses being equidistantly spaced apart about the periphery of the platform. The legs extend a relatively short distance above the platform and a relatively long distance below the platform so that a pair of supports nest readily when one is inverted. The platforms are polygonal and have a leg at one end and a recess at the other end of each side, so that the legs and the platform sides partially interfit when the supports are upright but side by side.

The present invention relates to nestable supports of the type having interfitting parts for the interengagement of a plurality of the supports in a more compact form. The invention is applicable to such supports as backless chairs, ottomans, tables and the like, whether cushioned or not.

It is an object of the present invention to provide nestable supports which can be interfitted so that a plurality of supports occupy no more room than a single support.

Another object of the present invention is the provision of nestable supports provided with cushions, in which the nesting of the supports also provides storage space for the cushions.

Still another object of the present invention is the provision of nestable supports which can be made in identical units.

It is also an object of the present invention to provide nestable supports which have a special relationship when not nested, so as to provide modular furniture which can be arranged in an infinite variety of combinations of units.

Finally, it is an object of the present invention to provide nestable supports which will be relatively simple and inexpensive to manufacture, easy to manipulate and rugged and durable in use.

Other objects and advantages of the present invention will become apparent from a consideration of the following description, taken in connection with the accompanying drawing, in which:

FIGURE 1 is a perspective view of a nestable support according to the present invention;

FIGURE 2 is a view similar to FIG. 1 but showing the relationship of a cushion to the support;

FIGURE 3 is a view of the support shown in FIG. 1, but inverted;

FIGURES 4–7 are elevational sequential views showing the nesting of two supports according to the present invention;

FIGURE 8 is a plan view of a modified form of nestable support according to the present invention; and

FIGURES 9 and 10 are enlarged fragmentary sequential plan views of two supports according to the present invention, showing their interengagement so as to form modular furniture.

Referring now to the drawing in greater detail, there is shown a nestable support in the form of an ottoman or stool **1**, comprising a hexagonal horizontal platform or shelf **3** to the six sides of which are secured upright sides **5**. In alternate corners of the hexagon, an upright leg **7** is

disposed. Each leg **7** is also hexagonal and has its legs disposed parallel to the six sides of the stool.

Shelf **3** is secured to sides **5** intermediate the height of sides **5** but closer to the top of sides **5** than to the bottom of sides **5**. A relatively short upstanding marginal portion **9** of sides **5** is thus left above horizontal shelf **3**, as best seen in FIG. 1, while a relatively wide marginal portion of sides **5** extends below horizontal shelf **3**, as can be seen in the inverted position of FIG. 3. Marginal portion **9** provides a relatively shallow recess on the upper side of horizontal shelf **3**, for the reception of a cushion **11** which preferably has a shape complementary to that of the stool, in this case hexagonal. Preferably, cushion **11** is of a thickness such that it extends above the upper ends of legs **7**.

Similarly, legs **7** extend above marginal portion **9** a relatively short distance but extend below the lower edges of sides **5** a substantially greater distance.

The sides **5** are identical to each other. Each is provided with a pair of chamfered surfaces **13** at each end thereof, the two chamfered surfaces at each end of a side **5** joining each other and the adjacent inner and outer surfaces of sides **5** at angles of 60 degrees. The chamfered surfaces **13** on the inner sides of an adjacent pair of sides **5** will accordingly be pressed flat against each other and secured together, while the outer chamfered surfaces **13** at the junction of two sides **5** will define between them a recess **15** bounded by a pair of surfaces **13** forming a 120 degree dihedral angle with each other.

The legs **7** are fixedly secured in alternate recesses **15** thus formed. Preferably, the chamfered surfaces which define the recesses **15** are of the same width as each planar surface of the legs **7**, so that the surfaces of the legs **7** that are immediately adjacent the surfaces received in recesses **15** will form with the outer surfaces of sides **5** dihedral angles of 120 degrees, it being understood of course that all the hexagons referred to are equilateral.

Each leg **7** is provided with metallic ferrules **17** at opposite ends thereof, so that the support can rest on a supporting surface either in the position of FIG. 1 or in the position of FIG. 3, without undue wear on any portion of the legs.

It will be apparent that a pair of identical supports, constructed as above, can be made to nest by turning one of them end-for-end and bringing the supports together with the legs in interfingering relationship, the legs **7** of one support being accommodated in the recesses **15** of the other support. FIGS 4–7 show the sequence of this nesting. FIG. 4 shows two identical supports in elevation. FIG. 5 shows the one support being raised while the other support is inverted. FIG. 6 shows the inverted support being inserted under the raised support; and FIG. 7 shows the raised support being lowered over the inverted support with the legs of each support received in the recesses of the other support.

Although the supports described thus far have been regular hexagons, it will be understood that they may have other shapes. For example, FIG. 8 shows that supports according to the present invention can be circular. In such a case, a stool **19** has a horizontal shelf **21** with circular sides **23** bounding it. Each stool **19** is provided with three equispaced legs **25**, alternating with semicircular recesses **27** for the reception of the legs of an identical stool **19**. It will be understood that shelf **21** and sides **23** and legs **25** have the same relationship to each other, when viewed in elevation, as do the corresponding parts of the embodiment of FIGS. 1–7.

It will therefore be seen that in the broadest aspects of the present invention, it is necessary only that the legs and their intervening recesses lie on an imaginary cylinder, and that the legs and recesses be equispaced from and parallel to the axis of that cylinder.

Similarly, although the supports thus far described have had each three legs, or a total of six legs and recesses, it will be understood that they may have any desired number of legs provided only that the number of legs is at least three. Thus, a four-legged support could be provided with four intermediate recesses, it being possible to make such a support octagonal or circular.

When in the upright position of FIGS. 1 and 2, it is possible to create modular furniture from identical units according to the present invention. The realization of this possibility is illustrated in FIGS. 9 and 10, from which it will be apparent that a leg and recess of one support will nest nicely with a recess and leg, respectively, of an adjacent support, if the supports are polygonal. Of course, this arrangement is not possible with a circular configuration as in FIG. 8.

The relationships demonstrated in FIGS. 9 and 10 make it apparent that modular furniture of an infinite variety of shapes can be created from identical units according to the present invention. These can extend in a straight line, or they can be disposed at 60 degree angles to other such units.

Cushions **11** can also enter into patentable combinations in the present invention. For example, if two modules are disposed together as in FIG. 10, one can have a cushion and the other not, so that the cushioned module serves as a seat and the uncushioned module serves as a table. Cushions **11** are also readily storable in the nested position of FIG. 7, it being necessary only to dispose the two cushions of the two units between the superposed horizontal shelves **3**. All six legs can then rest on the floor for maximum compactness of storage of the two units. Alternatively, one cushion can be stored between the shelves **3** and the other cushion can be on top of the nested assembly of two stools, so that the nested assembly serves not only as a means for storing the two stools, but also as a means for storing one stool while the other stool remains in use. Therefore, it will be apparent that the storage of two units by nesting according to the present invention does not destroy the utility of the assembled units. The assembly remains equally useful as a nested unit that occupies no more space than a single unit.

From a consideration of the foregoing disclosure, therefore, it will be evident that all of the initially recited objects of the present invention have been achieved.

Although the present invention has been describd and illustrated in connection with preferred embodiments, it is to be understood that modifications and variations may be resorted to without departing from the spirit of the invention, as those skilled in this art will readily understand. Such modifications and variations are considered to be within the purview and scope of the present invention as defined by the appended claims.

Having described my invention, I claim:

1. A support comprising a platform, at least three parallel legs supporting the platform, the platform having an outer periphery that is an equilateral polygon having sides equal in number to twice the number of legs, each side of the platform having a said leg at one end and a recess opening outwardly at the other end, the side walls of the recesses being complementary to the outer contour of the legs to receive the legs of identical said supports, the legs extending upwardly to a height at least as great as the height of the recesses.

2. A support as claimed in claim **1**, said legs being polygonal and having the same number of sides as said platform, the sides of the legs being parallel to the sides of the platform.

3. A support as claimed in claim **2**, said platform and said legs being hexagonal.

4. A support as claimed in claim **1**, said platform being hexagonal and having three legs disposed in alternate corners of the platform, said recesses opening outwardly in the corners between said legs, said legs extending a relatively short distance above the platform and a relatively long distance below the platform, said legs being hexagonal, the sides of the legs being parallel to the sides of the platform, the sides of said recesses forming dihedral angles adapted to receive two sides of a leg of an identical said support.

5. A support comprising a platform, at least three parallel legs supporting the platform, there being a recess outwardly opening in the edge of the platform between each adjacent pair of said legs, said recesses having side walls complementary to the outer contour of said legs to receive the legs of an identical said support, the legs and recesses of said support being so positioned as to lie on an imaginary cylinder whose axis is parallel to and equidistant from said legs, said legs extending a relatively short distance above the platform and a relatively long distance below the platform so that when one of a pair of identical said supports is inverted it may nest with the other support of said pair with said one support resting on the previously upper ends of its said legs and said other support resting on the lower ends of its said legs.

6. A support as claimed in claim **5**, said support being a stool having a marginal portion that extends below said platform.

7. A support as claimed in claim **6**, and a marginal portion upstanding about said platform to position a cushion, said downwardly extending marginal portion extending a substantially greater distance downwardly than said upstanding marginal portion extends upwardly above said platform.

8. A support as claimed in claim **5**, said platform being hexagonal and having three legs disposed in alternate corners of the platform, said recesses opening outwardly in the corners between said legs, the sides of said legs being parallel to the sides of the platform, the sides of said recesses forming dihedral angles adapted to receive two sides of a leg of an identical said support.

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