Aug. 22, 1961 R. S. SHELLY 2,997,267

BRACKET HANGER ASSEMBLY FOR SUPPORTING MULTIPLE UNIT STORAGE FILES

Filed March 5, 1959

FIG. 1.

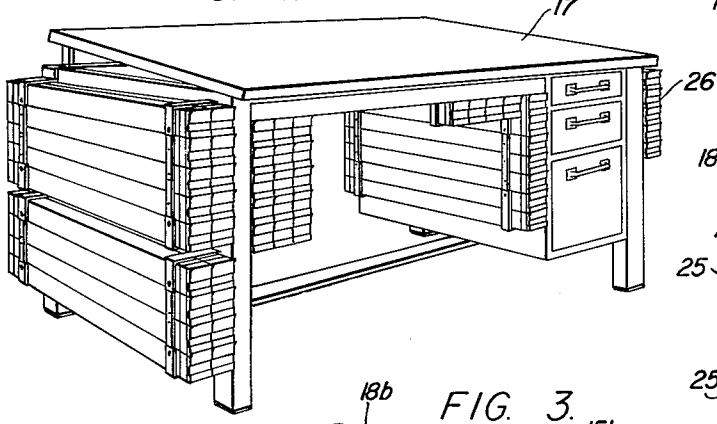


FIG. 2.

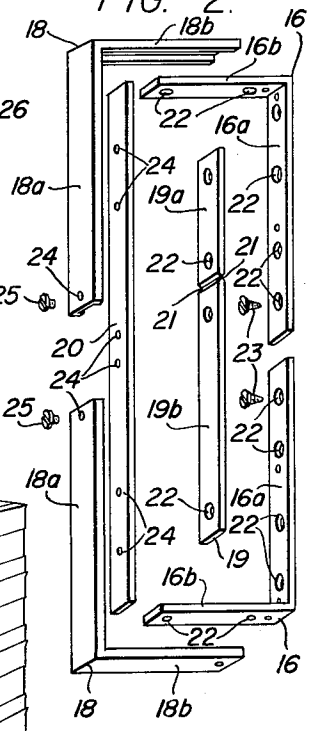


FIG. 3.

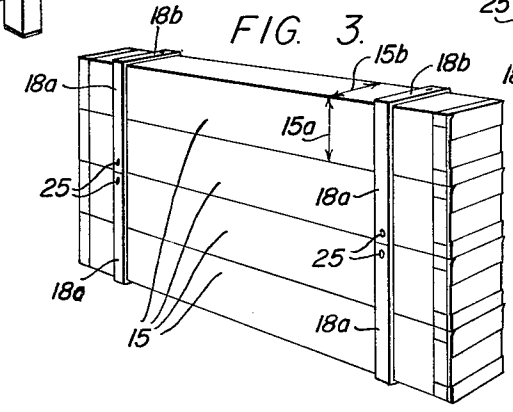


FIG. 4.

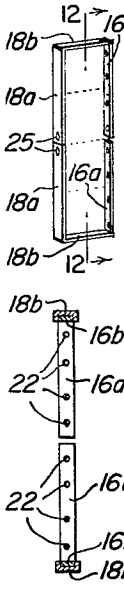


FIG. 5.

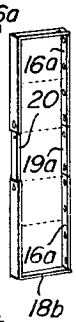


FIG. 6.

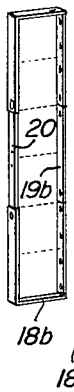


FIG. 7.

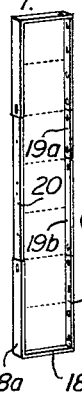


FIG. 8.

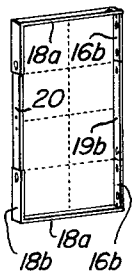


FIG. 9.

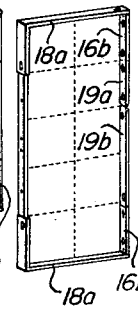


FIG. 10.

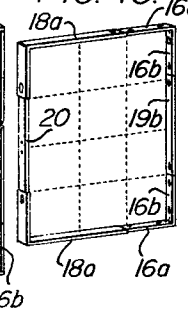


FIG. 11.

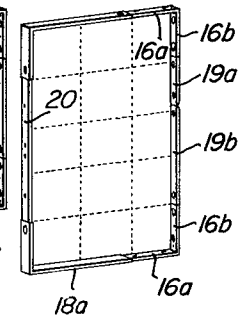


FIG. 12.

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2,997,267

BRACKET HANGER ASSEMBLY FOR SUPPORTING MULTIPLE UNIT STORAGE FILES

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Filed Mar. 5, 1959, Ser. No. 797,467
9 Claims. (Cl. 248—200)

This invention relates to bracket structures, and is concerned with providing a bracket hanger assembly capable of being quickly and easily installed to accommodate selected numbers of mutually connected storage file units preferably of the type disclosed in my U.S. Patents Nos. 2,871,080 and 2,872,265 granted January 27, 1959 and February 3, 1959, respectively.

Storage file units of my patented type are usually interconnected in multiple, stacked formation as a filing cabinet, and are supported by a special base structure disclosed in my copending application for U.S. Patent Serial No. 731,988 filed April 30, 1958, entitled, "Base Structure for Multiple Unit Storage File." However, it is often desirable to support limited numbers of the interconnected storage file units in handy proximity to work tables, desks, and the like.

The present invention has as its principal object the providing of a standard bracket hanger assembly of component structural parts capable of selective arrangement to accommodate several different possible combinations of storage file units in multiple, the assembly in its various selective arrangements being adapted for securement to a work table, desk, or the like at various available locations which may be selected by the user on the basis of convenience for use.

A principal feature of the invention is the provision of several modular structural components adapted for assembly in different ways depending upon the particular desired number and arrangement of interconnected storage file units. Such components include a pair of anchor bracket pieces of angle formation for inboard use with respect to the supporting desk, work table, or other supporting structure, a pair of hanger pieces of angle formation for outboard use, and elongate spacer pieces, one of which is subdividable on a modular basis.

Further objects and features of the invention will become apparent from the following detailed description of the presently preferred specific embodiment illustrated, by way of example, in the accompanying drawing.

In the drawing:

FIG. 1 represents a perspective view of a work table equipped with a variety of different arrangements of the storage file units grouped and interconnected in multiple, each group being supported by a different arrangement of the bracket hanger assembly of the invention;

FIG. 2, a perspective view drawn to considerably enlarged scale showing the several component parts of the bracket hanger assembly in correlated positions prior to interconnection and anchorage in any selected arrangement thereof;

FIG. 3, a perspective view drawn to a somewhat smaller scale than that of FIG. 2 of a particular arrangement of the bracket hanger assembly applied to a particular grouping of the storage file units;

FIGS. 4–11, corresponding perspective views of the several possible arrangements of this embodiment of the bracket hanger assembly, with the positions of the several storage file units being indicated by light lines; and

FIG. 12, a vertical section taken on the line 12—12 of FIG. 4.

Referring to the drawing:

In the illustrated embodiment of the invention, which is adapted to accommodate selected groups of storage

file units **15** of the type disclosed in my afore-referred-to Patent No. 2,872,265, the hanger bracket assembly comprises a pair of angle pieces **16** for inboard use as anchor brackets with respect to a supporting structure, such as a work table or desk **17**, and a pair of angle pieces **18** for outboard use as extension hangers.

Such hanger bracket assembly also comprises two elongate pieces **19** and **20**, respectively, for intermediate use as extension spacers between the angle pieces.

The two sets of angle pieces are preferably made so as to mate together and with the elongate extension spacer pieces when interconnected in various storage file unit receiving arrangements. As illustrated, it is most advantageous if the extension hanger angle pieces **18** are of longitudinally recessed formation—preferably of structural channel formation when considered longitudinally, as shown—and that the anchor bracket angle pieces **16** and elongate pieces **19** and **20** are of formation adapted to mate therewith—preferably of bar formation when considered longitudinally, as shown.

For enabling convenient installation of certain of the possible arrangements of the bracket hanger assembly, one of the elongate extension spacer pieces, here the piece **19**, is subdivided modularly with respect to the storage file units **15**. This is conveniently done by cutting or otherwise forming grooves **21** transversely of the length of the bar at respectively opposite sides thereof to establish a transverse line of break thereat.

All of the pieces component to the bracket hanger assembly of the invention conform in length dimensions with multiples of a module established by the transverse dimensions **15***a* and **15***b*, FIG. 3, of one of the storage file units **15**, and each is provided with fastening means which are arranged consistently with the module so as to enable fastening of the angle pieces and selected extension pieces together to form a peripherally extending retainer for a given grouping of the storage file units. Thus, as illustrated, the anchor bracket angle pieces **16** each have a long leg **16***a* two modules in length and a short leg **16***b* one module in length, while the extension hanger angle pieces **18** each, likewise, have a long leg **18***a* two modules in length and a short leg **18***b* one module in length. Elongate extension spacer piece **20** is four modules in length, while piece **19** is three modules in length and is subdivided into a section **19***a* one module in length and a section **19***b* two modules in length.

The fastening means in this illustrated instance are internally threaded screw holes **22** for receiving screws **23**, respectively, and internally threaded screw holes **24** for receiving screws **25**, respectively.

The various possible arrangements of the particular bracket hanger here shown are detailed in FIGS. 4–11, respectively, and the manner of installing these with respect to various groupings of storage file units **15** and the work table or desk **17** is shown in FIG. 1.

Thus, it can be seen that, in FIG. 4, only the two sets of angle pieces **16** and **18** and the elongate spacer piece **20** are employed to accommodate a single tier of units **15** four layers deep, the short legs **16***a* of respective anchor bracket pieces **16** being received by and mating with the short legs **18***a* of respective extension hanger pieces **18**, and opposite end portions of the elongate piece **20** being received by and mating with the long legs **18***b* of the respective extension hanger pieces **18**. The long legs **16***a* of respective anchor bracket pieces **16** abut end to end and are screwed directly to the work table or desk **17**, see **26**, FIG. 1. As shown in FIG. 3, two of these bracket hanger assemblies are used for installing the four layer tier of storage file units **15**, one near each end of the tier.

In FIG. 5, the one module section **19***a* is broken away from the longer section **19***b* of elongate spacer piece **19**,

and is used between the ends of the long legs **16***a* of anchor angles **16** to accommodate one more storage unit **15**, the longer section **19***b* being discarded.

In FIG. 6, the longer section **19***b* is used as an extension spacer, and the short section **19***a* is discarded. Six of the storage file units **15** are accommodated.

In FIG. 7, the entire and unbroken elongate spacer piece **19** is used, this version of the assembly accommodating a seven layer tier of the storage file units **15**.

In FIG. 8, double tiers of four layers are accommodated by interconnecting the short legs **18***b* of angle pieces **18** by elongate spacer piece **20** and using only the long section **19***b* of elongate spacer piece **19**.

In FIG. 9, the assembly of FIG. 8 is extended to accommodate an additional layer by using elongate spacer piece **19** unbroken.

In FIG. 10, triple tiers of four layers are accommodated by extending the mated long legs **16***a* and **18***a* of the respective angle pieces **16** and **18** of the assembly of FIG. 8, and, in FIG. 11, an additional layer is accommodated by using elongate spacer piece **19** unbroken, as in FIG. 9.

Whereas this invention is here illustrated and described with respect to a preferred embodiment thereof, it is to be understood that various changes may be made, within the scope of the claims which here follow, without departing from the essential inventive concepts here disclosed.

I claim:

1. A bracket hanger assembly for supporting multiple unit storage files, comprising two angle pieces for inboard use as anchor brackets; two angle pieces for outboard use as extension hangers; and two elongate pieces for intermediate use as extension spacers between said angle pieces, all of said pieces conforming in length dimensions with multiples of a module of predetermined length established by the transverse dimensions of one of the storage file units to be supported in multiple, and each of said pieces being provided with fastening means which are arranged consistently with said module so as to enable fastening of the angle pieces and selected extension pieces together to form a peripherally extending, multiple unit, storage file retainer adapted for fastening to a supporting structure by means of said inboard angle pieces serving as anchor brackets.

2. The assembly of claim 1, wherein two of said angle pieces are of longitudinally recessed formation for receiving end portions of the other angle pieces or end portions of the elongate pieces in mating relationship for fastening purposes.

3. The assembly of claim 1, wherein at least one of the elongate pieces is subdivided modularly by transversely extending break means intermediate its length, the component sections defined by said break means being each provided with fastening means.

4. The assembly of claim 3, wherein one of the elongate pieces is subdivided modularly by transversely extending break means intermediate its length, the component sections defined by said break means being each provided with fastening means.

5. A bracket hanger assembly for supporting multiple unit storage files, comprising two angle pieces for inboard use as anchor brackets; two angle pieces for outboard use as extension hangers; and two elongate pieces for intermediate use as extension spacers between said angle pieces, all of said pieces conforming in length dimensions with multiples of a module of predetermined length established by the transverse dimensions of one of the storage file units to be supported in multiple, and each of said pieces being provided with fastening means which are arranged consistently with said module so as to enable fastening of the angle pieces and selected extension pieces together to form a peripherally extending, multiple unit storage file retainer adapted for fastening to a supporting structure by means of said inboard angle pieces serving as anchor brackets, the said angle pieces for outboard use as extension hangers being of longitudinally recessed formation for receiving end portions of the other angle pieces or end portions of the elongate pieces in mating relationship for fastening purposes.

6. The assembly of claim 5, wherein the angle pieces for outboard use, considered longitudinally, are of structural channel formation, and both the other angle pieces and the elongate pieces, considered longitudinally, are of bar formation adapted to mate with the channels of the outboard angle pieces.

7. The assembly of claim 6, wherein one of the elongate pieces is subdivided modularly by transversely extending break means intermediate its length, the component sections defined by said break means being each provided with fastening means.

8. The assembly of claim 7, wherein one leg of each of the angle pieces is two modules in length and the other leg is one module in length; the subdivided elongate piece is three modules in length with a single break means providing a subdivision one module in length and a subdivision two modules in length; and the other elongate piece is four modules in length.

9. The assembly of claim 4, wherein at least one of the elongate pieces is subdivided modularly by transversely extending break means intermediate its length, the component sections defined by said break means being each provided with fastening means.

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