Sept. 5, 1967 M. BARD 3,339,751

STANDARD FOR SHELF ASSEMBLY

Filed Sept. 9, 1965

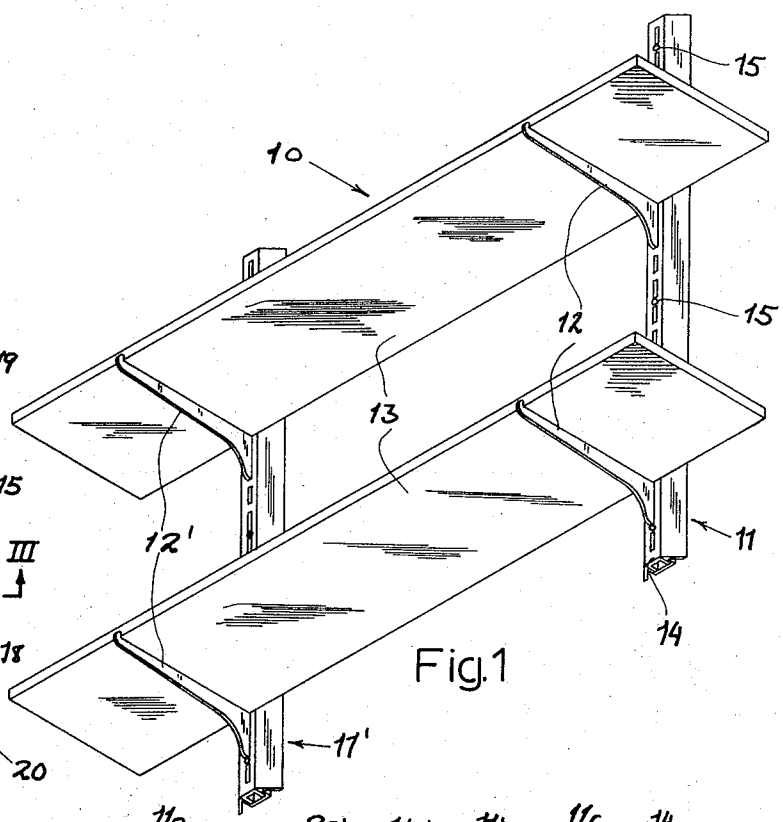


Fig.1

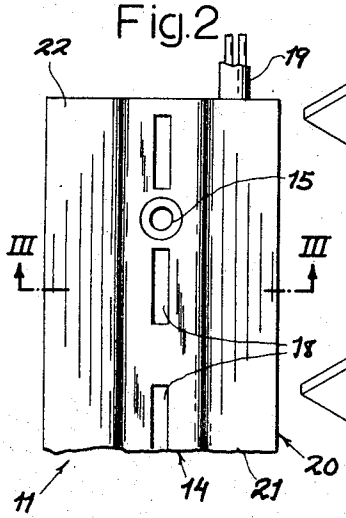


Fig.2

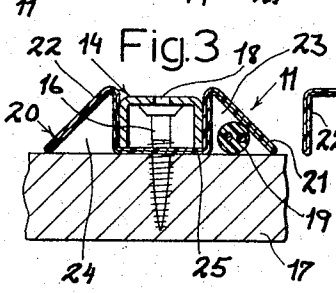


Fig.3

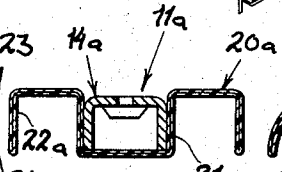


Fig.4

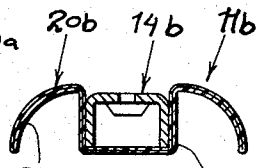


Fig.5

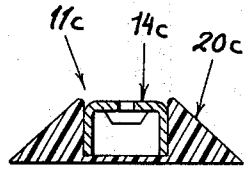


Fig.6

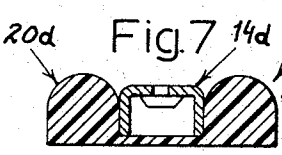


Fig.7

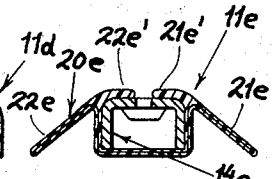


Fig.8

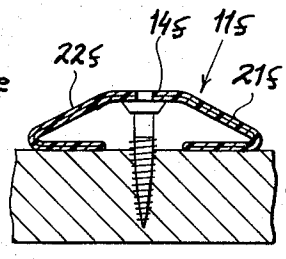


Fig.10

Fig.9

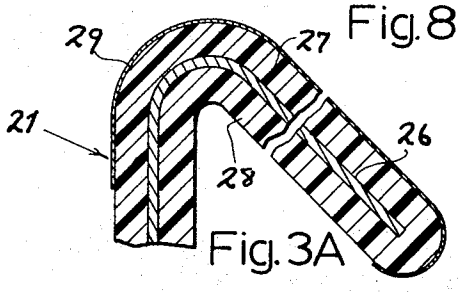


Fig.3A

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3,339,751

STANDARD FOR SHELF ASSEMBLY

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7 Claims. (Cl. 211—176)

ABSTRACT OF THE DISCLOSURE

Wall-mounted shelf standard having an upright channel-shaped bar with means for attaching shelf brackets thereto and a vertical sheath receiving the bar and having a pair of lateral vertical strips flanking the forward face of this bar with a width and a depth substantially equal to the width of the forward strips, a fastening bolt, screw or the like passing through mounting holes in the bar and a bridge portion interconnecting the strips, the strips having generally a triangular profile and forming oblique side faces including obtuse angles with the forward space.

My present invention relates to a wall-mounted standard of the type used to support bookshelves, display cabinets and similar projecting structures adapted to rest on brackets anchored to such standards.

A standard of this description generally consists of an elongated upright member, usually a metal bar, provided with a plurality of vertically spaced mounting holes for the passage of screws or the like along with other formations, such as short vertical slots, designed for engagement by mating formations on the shelf-supporting brackets to be secured thereto.

These uprights are sometimes regarded as unsightly attachments to their supporting wall and, by presenting lateral surfaces which include 90° angles with that wall, form dust collectors which cannot be conveniently cleaned by, say, a wall-dusting nozzle of a vacuum cleaner.

It is, therefore, an object of my invention to provide a standard of this description which blends more closely with the adjoining wall surface, not only for esthetic reasons but also to facilitate cleaning.

When books or other heavy articles are shifted along shelves carried on such standards, they may strike the projecting side of the standard and, by the resulting impact, may loosen the screws by which the standard is held onto the wall. Thus, another object of my invention is to provide means for protecting the bracket-carrying member of such standards from lateral impacts of this nature.

Frequently a lamp, clock or other electrical appliance is placed on the uppermost shelf and must be connected by suitable wiring to an outlet near the base of the assembly. A further object of my invention, therefore, is to provide a standard of the character described which readily accommodates such wires in its interior, thus not only hiding them from view but also shielding them mechanically as well as electrically.

A standard embodying my invention comprises an elongated upright member which has a flat forward face forming a vertical land with the usual mounting holes and bracket-engaging formations and which further has a pair of lateral wings flanking this forward face, the wings defining a wall-contacting rear surface and being advantageously each of a width and a depth substantially equal to the width of the forward face.

The upright member may be a unitary body, e.g. of extruded resin or laminated sheet material, or may comprise a conventional perforated metal bar enveloped by a protective sheet which forms the aforedescribed lateral wings. These wings, in any case, will serve as a cushion for the bracket-carrying land and will absorb lateral impacts; they also may be made hollow so as to form

upright channels in which electrical wiring or the like may be disposed. Particularly if these wings are of generally triangular profile so as to form oblique side faces which include an obtuse angle with the central forward face of the upright, dust collection is minimized and the exposed surface of the upright can be easily cleaned by wiping or suction. Also, these oblique surfaces will tend to deflect oncoming objects for further protection against lateral shocks.

The invention will be described in greater detail with reference to the appended drawing in which:

FIG. 1 is an isometric view of a shelf assembly including a pair of standards according to the invention;

FIG. 2 is an enlarged fragmentary front-elevational view of one of the standards shown in FIG. 1;

FIG. 3 is a cross-sectional view taken on the line III—III of FIG. 2;

FIG. 3A shows, in a sectional view similar to that of FIG. 3 but drawn to a greatly enlarged scale, a small part of the structure shown in FIGS. 2 and 3; and

FIGS. 4–10 are views similar to FIG. 3, showing various modifications of the structure.

The shelf assembly **10** shown in FIG. 1 comprises a pair of identical standards **11**, **11'** having brackets **12**, **12'** removably fitted thereon for the support of shelves **13**. As more clearly shown in FIG. 3 for the member **11**, each of these standards comprises an upright metal bar **14** with mounting holes **15** for screws **16** (FIG. 3) which are threaded into an adjoining wall **17** for firmly securing the upright **11** thereto. Bar **14** also has vertical slots **18** which are selectively engageable, in a manner known per se, by mating projections (not shown) of brackets **12** to hold the latter at a chosen level.

In accordance with an important feature of my invention, I surround the bar **14** with a protective sheath **20** having a pair of lateral wings **21**, **22** whose oblique surfaces define the sides of the generally trapezoidal profile of the upright **11**. These wings, which are of substantially triangular cross-section, are hollow to form a pair of upright channels **23**, **24** which may be used to accommodate electrical wiring, e.g. as indicated at **19**. It will be noted that the depth and width of each wing **21**, **22** is substantially equal to the width of the perforated front face or land of bar **14** so that the entire standard **11** has a width equal to about three times the width of that face.

The wings **21**, **22** are shown formed as rearwardly open strips of sheet material, of uniform transverse cross-section, interconnected by a bridge piece **25** integral therewith, the screws **16** passing through the bridge piece **25** which may be preperforated for that purpose or may be pierced in situ.

As illustrated more clearly in FIG. 3A, the body of sheath **20** is a laminate composed of an inner metal foil **26** and front and rear outer layers **27**, **28** of plastic material which may be suitably colored or transparent; in addition, a decorative covering layer **29** may extend over the front face of each wing **21**, **22** to simulate, for example, a body of grained wood.

In FIG. 4 I have shown a modified standard **11***a* with a protective sheath **20***a* whose wings **21***a*, **22***a*, flanking the metal bar **14***a*, are of substantially square profile while still retaining the depth and width relationship described in connection with the preceding embodiment. This is also true of the upright **11***b* shown in FIG. 5 where the wings **21***b*, **22***b* of sheath **20***b*, enveloping the metal bar **11***b*, has convex front surfaces somewhat intermediate the configurations of FIGS. 3 and 4.

In FIG. 6 I show another trapezoidal sheath **20***c*, forming part of an upright **11***c*, which however is extruded around the bar **14***c* as a solid body of plastic material.

The same technique is used for the upright **11***d* of FIG. 7 where bar **14***d* is enveloped by an extruded plastic sheath **20***d* whose wings, however, have a partly convex rather than triangular cross-section.

In FIG. 8 I show an upright **11***e* wherein the bar **14***e* is enveloped by a laminated sheath **20***e* which differs from sheath **20** of FIG. 3 only by the fact that the wings **21***e*, **22***e* terminate in integral extensions **21***e'*, **22***e'* overlying the forward land of bar **14***e* except for a central zone containing the slots and holes **15** and **18** (FIG. 2) thereof.

FIG. 9 illustrates a further modification in the form of a standard **11***f* made in a single piece, its laminated body of sheet material forming both a land **14***f* and oblique wing portions **21***f*, **22***f* including an obtuse angle with the land **14***f*.

In FIG. 10, finally I show a standard **11***g* whose bar **14***g* has the flanges of its channel profile engaged by separate wing members **21***g*, **22***g*, again defining a generally trapezoidal profile with member **14***g*.

In those cases where the wings adjoining the perforated land of the standard include therewith an obtuse angle, preferably of about 135° (as in FIGS. 3, 6, 8 and 10) or slightly greater (as in FIG. 9), the oblique front surfaces of these wings will serve to deflect laterally oncoming objects so as to protect the mounting screws **15** against excessive impact. A certain degree of protection will, however, also be afforded by the wings of the other embodiments which, by virtue of their inherent elasticity, act as cushions against such lateral shocks. Except in the cases of FIGS. 6 and 7, ample space is provided within the wings for wires as shown at **19** in FIGS. 2 and 3; in the embodiments of FIGS. 3–5, 8–10, moreover, these wires are kept away from the central region of the standard by transverse portions of the sheath so that there is no danger of contact with screws **16** or other fastening means.

It will be apparent that the profile of either the solid sheaths **20***c*, **20***d* in FIGS. 6 and 7 or the unitary body **11***f* in FIG. 9 could be modified, e.g. along the lines of FIGS. 4 and 5, or that the sheaths of FIGS. 4, 5 and 8 could be subdivided into separate wing members as illustrated in FIG. 10; similarly, front extensions as illustrated at **21***e'*, **22***e'* of FIG. 8 could also be used on the sheaths of FIGS. 4–7 and 10. These and other modifications, readily apparent to persons skilled in the art, are intended to be embraced within the spirit and scope of my invention except as otherwise defined in the appended claims.

I claim:

1. A wall-mounted standard for the support of shelves and the like, comprising an elongated upright bar with a flat forward face forming a vertical land provided with a plurality of vertically spaced mounting holes and formations engageable by shelf-supporting brackets, said standard further including a sheath receiving said bar and provided with a pair of lateral vertical strips of similar transverse cross-section flanking said forward face and defining a wall-contacting rear surface, each of said strips having a width and a depth substantially equal to the width of said forward face, said strips and sheath being integral with one another, and fastening means passing through said mounting holes, said strips being interconnected by a bridge portion traversed by said fastening means.

2. A standard as defined in claim **5** wherein said sheath is of generally trapezoidal, said forward face defining the minor base of the trapezoid.

3. A standard as defined in claim **9** wherein the sides of the trapezoid include an angle of substantially 135° with said minor base.

4. A standard as defined in claim **5** wherein said rear surface has a width equaling substantially three times the width of said forward face.

5. A standard as defined in claim **5** wherein said sheath consists of at least partly organic sheet material.

6. A standard as defined in claim **5** wherein said wings are hollow and form a pair of upright channels alongside said forward face.

7. A wall-mounted standard for the support of shelves and the like, comprising an elongated upright bar with a flat forward face forming a vertical land provided with a plurality of vertically spaced mounting holes and formations engageable by shelf-supporting brackets, said standard further including a sheath receiving said bar and provided with a pair of lateral vertical strips of uniform transverse cross-section flanking said forward face and defining a wall-contacting rear surface, each of said strips having a width and a depth substantially equal to the width of said forward face, said strips being of generally triangular profile and forming oblique side faces including an obtuse angle with said forward face.

References Cited

UNITED STATES PATENTS

2,241,783	5/1941	Kennedy	52—718
2,275,127	3/1942	Brown	52—718
2,796,158	6/1957	Miles et al.	52—241
3,016,590	1/1962	Shanok et al.	24—73
3,135,491	6/1964	Knape et al.	248—243
3,269,077	8/1966	Janus	52—730

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,339,751 Dated June 10, 1970

Inventor(s) Martin Bard

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 4, Line 12 (Claim 2, Line 1):

Read "5" as -- 1 -- .

Column 4, Line 15 (Claim 3, Line 1)

Read "9" as -- 2 -- .

Column 4, Lines 18, 21 and 23 (Claims 4, 5 and 6, Line 1 of each)

Read "5" as -- 1 --, each occurrence .

SIGNED AND
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SEP 22 1970

(SEAL)
Attest:

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