Nov. 22, 1960 W. BUCKLES 2,961,061

MATERIAL STAND

Filed June 2, 1958

FIG. 1.

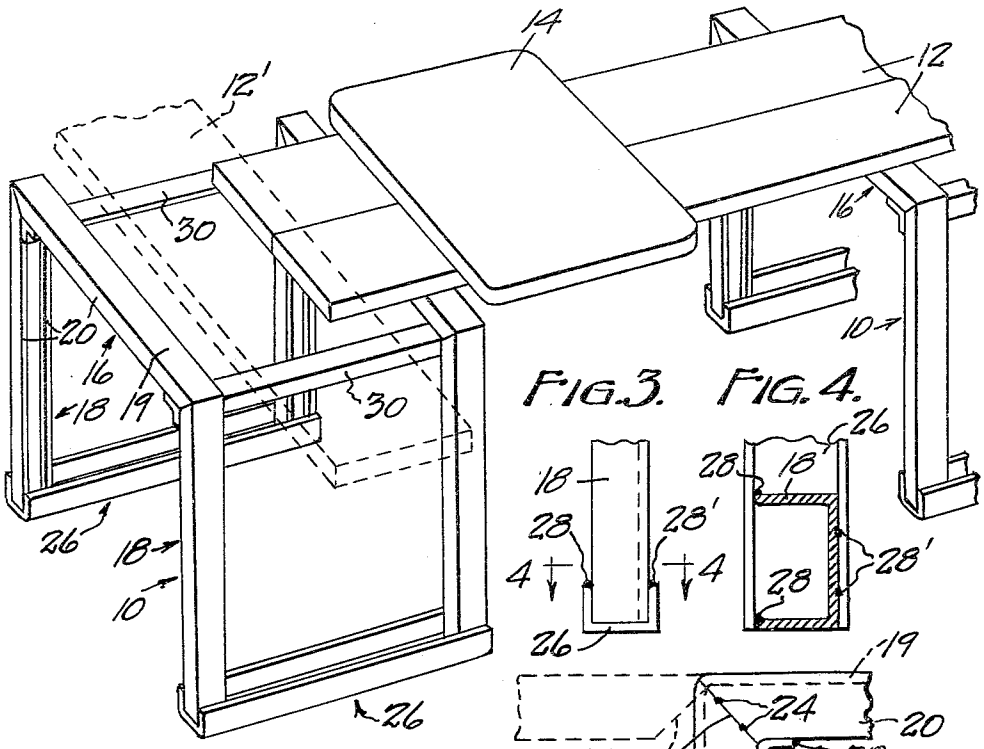


FIG. 3. FIG. 4.

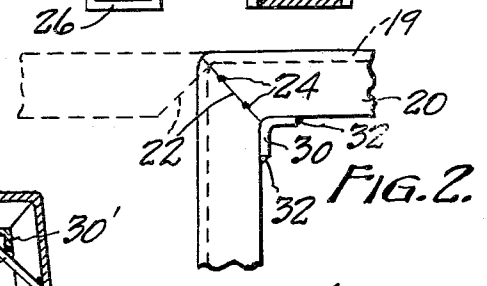


FIG. 2.

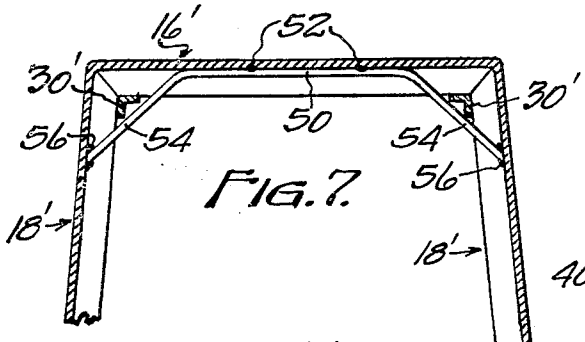


FIG. 7.

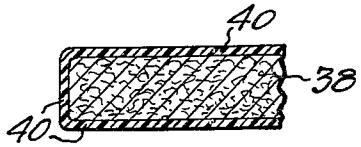


FIG. 6.

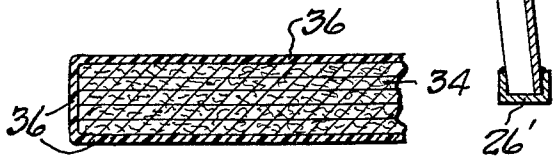


FIG. 5.

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MATERIAL STAND

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2 Claims. (Cl. 182—181)

This invention relates to improvements in material stands, and particularly to material stands which are useful by building contractors and brick masons in the construction of buildings.

The primary object of this invention is to provide a novel, simple, sturdy, strong, inexpensive, versatile material stand for supporting materials and for supporting runways upon which workmen can stand while erecting a building wall, such as a masonry wall.

Other objects will be apparent from the following specification.

In the drawing:

Fig. 1 is a perspective view of a material stand used to support panels, planks or other members at an elevated position;

Fig. 2 is an enlarged detail view of a part of the device in side elevation;

Fig. 3 is an enlarged detail view in side elevation of a part of the stand;

Fig. 4 is a sectional view taken on line 4—4 of Fig. 3;

Fig. 5 is a sectional view of one form of panel used with the device;

Fig. 6 is a sectional view illustrating another form of panel usable with the device;

Fig. 7 is a vertical transverse sectional view of a modified form of the device.

Referring to the drawing which illustrates the preferred embodiment of the invention, the numeral **10** designates a material stand adapted to support thereon planks or runway members **12** or panel members **14**, or any other desired article.

Each of the stands is preferably formed of a pair of inverted U-shaped structural members, preferably formed of channel iron, to provide top members **16** and leg members **18**. The channel member preferably has its web or central portion **19** positioned outermost and its flanges **20** projecting inwardly. In the formation of the members **16**, **18** a channel member of desired length, preferably notched at **22**, as illustrated in Fig. 2, at the flanges **20** thereof with a V-notch whose edges are extended 90 degrees to each other and at 45 degrees to the base of the channel. The parts **18** are then swung to substantially 90 degree angle to the part **16** to bring the edges of the notch into abutting engagement to be welded together at 24 as by means of spot welds or butt welds. The legs **18** will be of the same length.

Two of the U-shaped structural members **16**, **18** are assembled together in spaced parallel relation. Thus a transverse structural member **26** of desired length connects the adjacent free end portions of the legs **18** of adjacent units **16**, **18**. As here shown the structural member **26** is preferably a channel into which the bottom ends of the legs **18** fit, to be welded at **28** adjacent the upper margins of the opposite flanges of the channel **26**. Thus, as best seen in Fig. 4, the welds **28** may include welds adjacent the free edge of each flange **20** of the legs **18** and welds **28'** provided at spaced points on the web of the leg **18**. The central part or web of the channel **26**

provides a surface of large bearing area engageable with the ground to support the material stand firmly and to distribute the weight thereof, and the weight supported thereby, over a substantial area, whereby a solid support of the stand is provided, and, furthermore, the danger of penetration of the stand into moist earth under weight or load is reduced to a minimum.

The opposed U-shaped structural members **16**, **18** are also preferably interconnected by structural members **30**, such as angleirons which are welded at **32** to the edges of the flanges **20** of the parts **16** and **18** to extend parallel to the members **26** inwardly therefrom in a lateral direction and below the level of the top runs **16** of the cross-members.

The proportions of the parts are preferably such that the spacings of the legs **18** of each of the U-shaped members **16**, **18** is at least equal to or preferably greater than the height of the legs **18**, and the spacing between the opposite inverted unit **16**, **18** is preferably not greater than the height of the legs **18** and may be less than the height of said legs.

The stands **10** may be used in groups aligned alongside the wall of a building in selected spaced relation so as to support thereon a plank or planks **12** to form a runway or to support bricks, blocks, mortar, or like material, including mortar boards **14**. The proportions of the parts are preferably such that at least two planks **12** may be supported side by side upon the stands **10** when the runs **16** of the stands are positioned perpendicular to the wall, as shown in full lines in Fig. 1. It will be understood, however, that the stands **10** may be positioned with their runs **16** substantially parallel to the wall so as to support a plank or planks **12'**, as illustrated in dotted lines in Fig. 1, parallel thereto. In the latter case the planks **12'** will be substantially flush at their top surfaces with the top surface of the run **16**, and will be retained by said runs against lateral sliding upon the stands.

The material stands will preferably be sold as a part of a set or system which will include panel members adapted for use as mortar boards, as illustrated at **14**. These panels may be of any desired size and shape, and preferably will be protected by a surface sheath. In Fig. 5, I have shown a panel **34** which is formed of plywood and which has sprayed, painted or otherwise applied thereto, a continuous film or coating **36** of a synthetic resin material, such as cellulose acetate, styrene, epoxy, acrylic resin, or the like. The board may be sprayed, dipped or brushed for application of the resin film, or, if desired, a preformed film of plastic material may be adhered or cemented to the panel **34** to cover the faces and edges thereof.

It is not essential that plywood or solid wood be used, and any desired composition material having requisite rigidity and strength may be employed. Thus, as illustrated in Fig. 6, a panel **38** formed of fiberboard, preferably of the character commonly used for insulation purposes, although matrials of more compact character, such as those known as hardboard, may also be employed. The panel **38** likewise is provided with a film or coating **40** of synthetic resin material completely spanning the faces and edges thereof.

The panels **14** may be supported upon planks **12**, **12'**. Alternatively, a single panel **12** may be supported upon the top runs **16** of a material stand **10** to constitute the single stand or table for the support of mortar or other articles used during the erection of a building. For this purpose the panel **14** will preferably be of a length equal to or slightly greater than the length of the members **16** and will be substantially rectangular and preferably substantially square.

A modified form of material stand is illustrated in Fig. 7 wherein the legs **18'** of the stand preferably diverge

downwardly and outwardly from the upper run or portion **16** of the stand. The free ends of these legs are connected by members **26'** and the upper portions of the two units are interconnected by members **30'** in substantially the same manner described above. Suitable means may be provided to reinforce and brace the downwardly diverging legs **18'**, and such means are shown in the nature of a bar **50** welded at **52** at spaced points to the upper portion **16'** of each inverted U-shaped member **10**, and thence at its ends extending downwardly and outwardly at **54** in inclined position to pass below the members **30'** and to extend to the leg portions **18'** at which they are welded at **56**. In this construction the downward diverging relation of the legs can accommodate nested or interfitting stacking of the stands, and the provision of the braces **50**, **54** increases the strength of the unit so that the stand may assuredly support heavy weights without danger of spreading of the legs **18**.

While the preferred embodiments of the invention have been illustrated and described herein, it will be understood that changes in the construction may be made within the scope of the appended claims without departing from the spirit of the invention.

I claim:

1. A material stand for supporting substantially horizontal members usable by building contractors, comprising a pair of inverted U-shaped rigid structural members each having a web portion positioned outwardly thereof and at least one reinforcing flange projecting inwardly and longitudinally from said web portion, parallel lower rigid structural members interconnecting the free end portions of adjacent U-shaped members and including a substantially flat web supporting the lower ends of said inverted U-shaped members and at least one annular flange projecting upwardly from said web alongside and secured to the end portions of said U-shaped members, the webs of said lower structural members being coplanar, and upper rigid parallel structural members interconnecting the upper portions of adjacent U-shaped members and located below the level of the upper portions of said U-shaped members and inwardly of the upright portions of said U-shaped members, and a brace member secured to the central upper portion of each inverted U-shaped member and having downwardly diverging end portions secured to the upright portions of said U-shaped member spaced below the upper portion thereof.

2. A material stand for supporting substantially horizontal members usable by building contractors, comprising a pair of inverted U-shaped rigid structural members each having a web portion positioned outwardly thereof and at least one reinforcing flange projecting inwardly and longitudinally from said web portion, parallel lower rigid structural members interconnecting the free end portions of said adjacent U-shaped members and including a substantially flat web supporting the lower ends of said inverted U-shaped members and at least one annular flange projecting upwardly from said web alongside and secured to the end portions of said U-shaped members, the webs of said lower structural members being coplanar, and upper rigid parallel structural members interconnecting the upper portions of adjacent U-shaped members and located below the level of the upper portions of said U-shaped members and inwardly of the upright portions of said U-shaped members, the upright portions of said inverted U-shaped members diverging downwardly to accommodate stacking of said members, and brace members extending diagonally between and secured to the upper portion and upright portions of said U-shaped members and extending below said last named upper structural members.

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