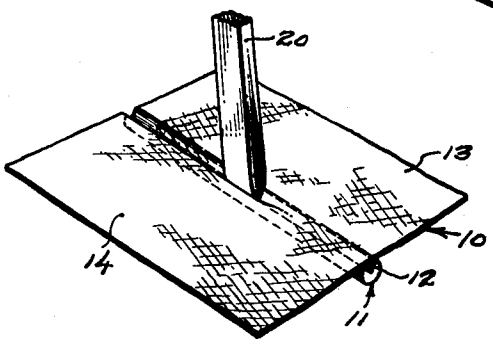
Aug. 31, 1954 A. H. DUNLAP 2,687,558

CORNER-BEAD FOR DRY-WALL CONSTRUCTION

Filed March 15, 1949

Fig. 1.



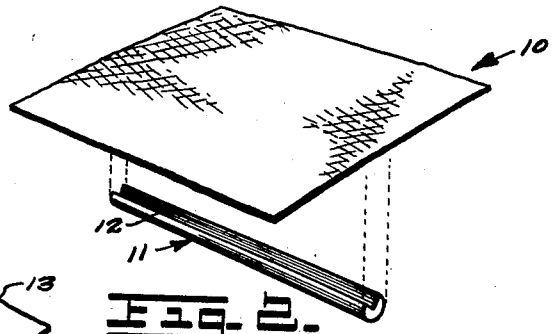


Fig. 2.

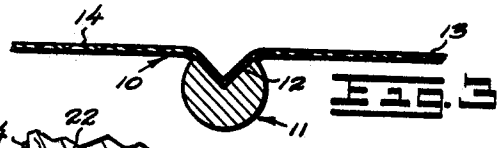


Fig. 3.

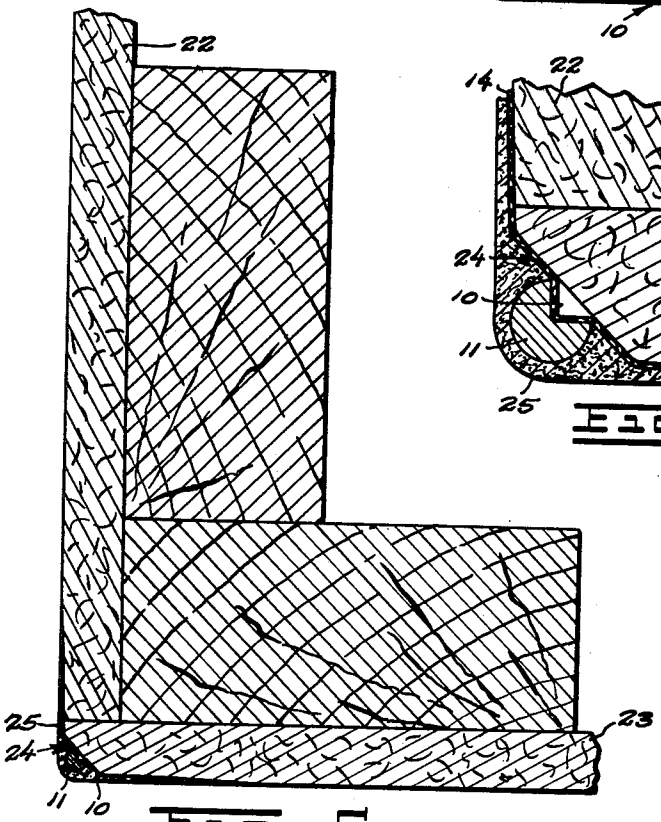


Fig. 5.

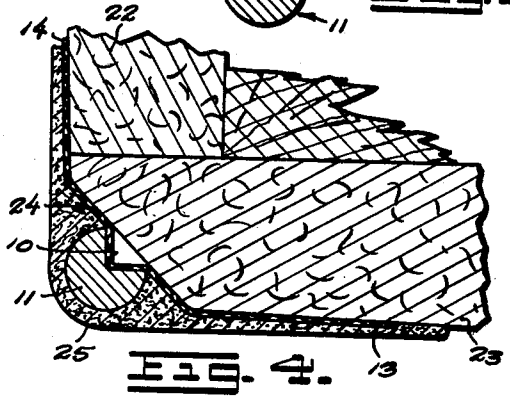


Fig. 4.

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CORNER-BEAD FOR DRY-WALL CONSTRUCTION

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Application March 15, 1949, Serial No. 81,549

2 Claims. (Cl. 20—74)

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This invention relates to corner-beads for use in dry-wall construction, and namely that type of construction in which the walls of a room are faced with plaster board. The invention aims to provide a perfected bead structure which will establish a base over which plaster may be easily worked in rounding off an outside corner of the room, and is an improvement over the corner-bead illustrated and described in my pending application for Letters Patent of the United States filed December 6, 1948, Ser. No. 63,689.

It is a particular object to provide a corner-bead of considerably simpler and more inexpensive construction than the corner-bead shown in the prior said application to related subject matter, but in point of general objectives the inventions of the two applications are directed to the accomplishment of much the same ends, and this is to say the provision of a corner-bead, capable of being easily set in place, which will perform the office of a guage for ready application of a suitable composition of plastic matter such, for example, as Swedish putty to enable the corner to be rounded off and give to the room the smooth and unbroken appearance commonly associated with wet-wall plaster construction, and which establishes an effective bond and key for the applied putty to securely hold the latter against liability of breaking away from the underlying plaster board.

The product of the present invention essentially comprises a web or tape-like strip of easily flexed open-mesh material having a longitudinal median portion thereof pressed into a grooved rod and made a secure part of the latter, and the invention consists in this product and in the method of producing the same, hereinafter described and claimed.

In the accompanying drawings:

Figure 1 is a fragmentary perspective view portraying the tape in course of having its said longitudinal median portion pressed into the receiving groove, or furrow, of the associated rod, and portraying, as a more or less schematic illustration of one mode of manufacture, a plow-nosed hot iron pressing the tape into the furrow.

Fig. 2 is a fragmentary exploded view of my corner-bead, also in perspective.

Fig. 3 is a transverse sectional view of the completed bead structure taken to a scale enlarged from that of the preceding views and made fragmentary to the extent that the laterally projected wing portions of the tape are broken away.

Fig. 4 is a fragmentary horizontal sectional view showing my corner-bead in the performance

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of its intended function, that of a guage and locking key for Swedish putty or other like or suitable plaster-like substance used to round off the outside corner of a wall surfaced with plaster board; and

Fig. 5 is a view similar to Fig. 4 but taken to a reduced scale in order better to visualize the dry-wall construction with which the present invention is concerned.

Referring to said drawing, the components of the corner-bead, and namely the tape and the rod, are denoted by the numerals **10** and **11**, respectively.

The rod, preferably of plastic composition with celulose acetate butyrate (commercially available as Tenite II) being presently considered the most desirable material, issues as the product of an extrusion process and in its forming is made circular other than for a furrow **12** which runs coextensive of the length. Sectionally considered, this furrow occurs as a sectoral shaped re-entrant notch comprehending approximately one-fourth the circumference of the rod within its perimetrical span.

The employed tape is open mesh in character with a fair degree of pliability, and I prefer to use a textile fabric, such, for example, as buckram or sized cheese-cloth. As the corner-bead is now constructed, the tape used is 2¼" in width and the complementing rod is given a diameter of ⅛".

In producing the corner-bead structure, the tape is brought into overlying relation to the furrowed face of the rod, and with the rod so placed as to approximately coincide with the longitudinal median line of the tape, whereupon the tape is caused to be pressed into the furrow firmly against the side walls of the latter and the introduced portion of the tape is then bonded, either by application of heat or by the use of cement, to these side walls. When bonding by heat, and this is my now preferred procedure, there is employed a hot iron such as I indicate by **20** in Fig. 1. Presenting a plow-nose corresponding in shape to the sectional contour of the furrow, said hot iron renders the wall surfaces of the plastic momentarily fluid and causes the interlaced threads of the open-mesh tape to be pressed into this soft surface layer, the result being to integrate these threads with the plastic as the latter sets. Should cementing be employed in lieu of the hot iron, methalene dichloride is desirably employed as the cementing agent, the result being much the same as a hot iron in that the methalene dichloride acts as a solvent giving

momentary fluidity to a thin layer of the plastic along the wall surfaces of the furrow.

By the use of the present corner-bead, a carpenter engaged in dry-wall construction and who is finishing off an outside corner of a room need only butt-joint two sheets of plaster board, indicated by **22** and **23** in Figs. 4 and 5, and then sand back the exposed edge of the lapping sheet to establish a bevel face **24**. The corner-bead is placed perpendicularly in centered relation upon this bevel face and is or may be localized by glue. The placement is such as to have the furrow lie in facing relation to the bevel, and the wings **13** and **14** which extend laterally in opposite directions from the parent rod consequently are enabled to closely hug the bevel with the extremities projecting beyond the side limits of the bevel and being pressed back against the normal faces of the two meeting sheets of plaster board. So applied, the corner-bead gives all the appearance of a quirk molding, and the carpenter then applies Swedish putty or other like or suitable material, as indicated by **25**, over the corner in sufficient quantity to fill the quirks which occur at each side of the rod and to completely cover the rod and its wing extensions **13** and **14**. This putty is trowelled down to a smooth surface more or less flush with the rounded face of the rod and with the normal faces of the plaster-board sheets, whereupon paint is applied to give to the corner the smooth and unbroken appearance of a wall finished with lath and plaster. It is to be understood that buckram or sized cheese-cloth, the two tape-forming materials which, by way of example, I have heretofore referred to as being suitable for my purpose, each have little more than paper thickness, wherefore only the thinnest layer of putty is required for coating the wing extremities which project beyond the side-edge limits of the bevel. While it would appear from the drawing that the putty applied over these wing extremities is fairly thick, this exaggerated showing is deemed to be necessary in order that the relationship of parts will be clearly apparent from the illustrative disclosure. The finished corner, in actual practice, shows no noticeable protrusion beyond the planes occupied by the normal exposed faces of the two abutting sheets of plaster board.

While having herein referred to the rod element of my bead as being preferably composed of a thermo-plastic material, it is my belief that novelty is present in the broad conception of a corner-bead comprised of a tape-like strip of flexible material employed in conjunction with a backing rod, be the latter made of plastic, wood or metal, presenting a longitudinal furrow into which a central longitudinal portion of the tape is received, and with the introduced portion of the tape bonded to the rod.

The invention admits of minor changes in its details of construction without departing from the spirit of the invention, and it is my intention that no limitations be implied and that the hereto annexed claims be given a scope fully commensurate with the broadest interpretation which the employed language fairly permits.

What I claim is:

1. In a dry-wall construction, a corner bead for use in the recess formed by beveling the outside corner of two abutting angularly disposed sheets of wall-board and which comprises a relatively inflexible solid cylindrical rod having a relatively deep longitudinal groove extending the length thereof and a fibrous web of fairly flexible material pressed into the groove and adhesively united with the walls of the latter, the union occurring on the longitudinal median line of the web and the width of the web being such that both sides thereof extend laterally beyond the rod.

2. In a dry-wall construction, a corner bead for use in the recess formed by beveling the outside corner of two abutting angularly disposed sheets of wall-board, and which comprises a relatively inflexible solid cylindrical rod of plastic composition having a longitudinal V-shaped groove extending the length thereof and having a web of open mesh textile fabric adhesively secured on its longitudinal median line within the groove of the rod, the connection being one in which the interlaced threads of the web are embedded in the plastic which composes the rod, and the width of the web being such that both sides thereof extend laterally beyond the rod.

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