March 6, 1928.

1,661,382

W. I. NOBLE

BEAD HOLDER

Filed Oct. 5, 1925

2 Sheets-Sheet 1

FIG. 1.

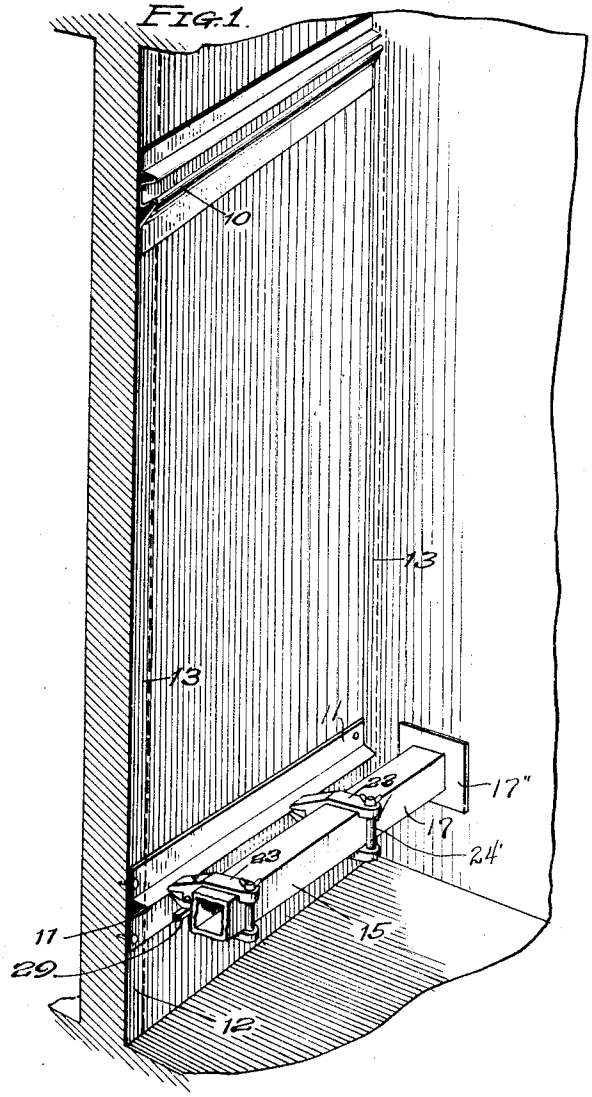


FIG. 2.

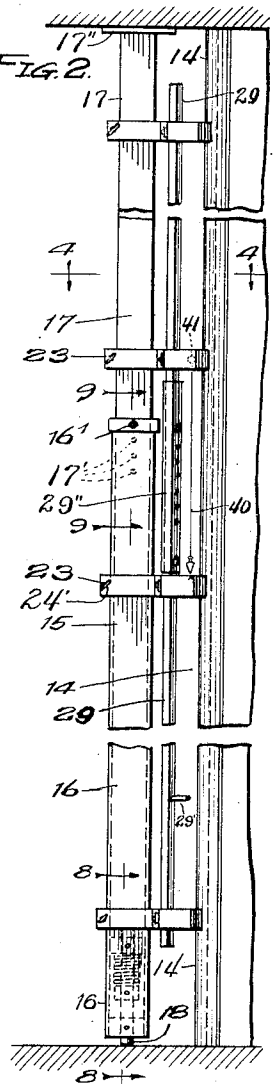
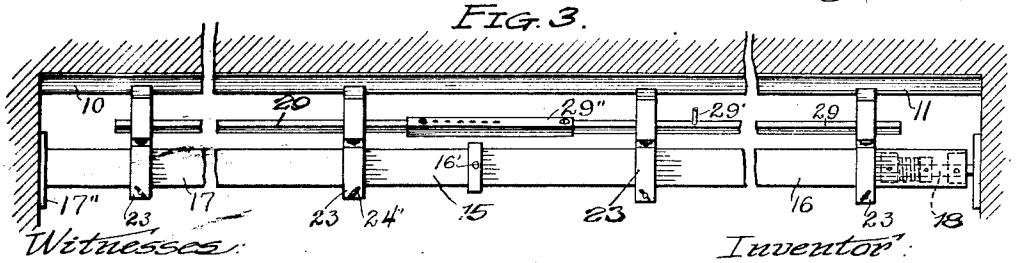


FIG. 3.



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2 Sheets-Sheet 2

FIG. 4.

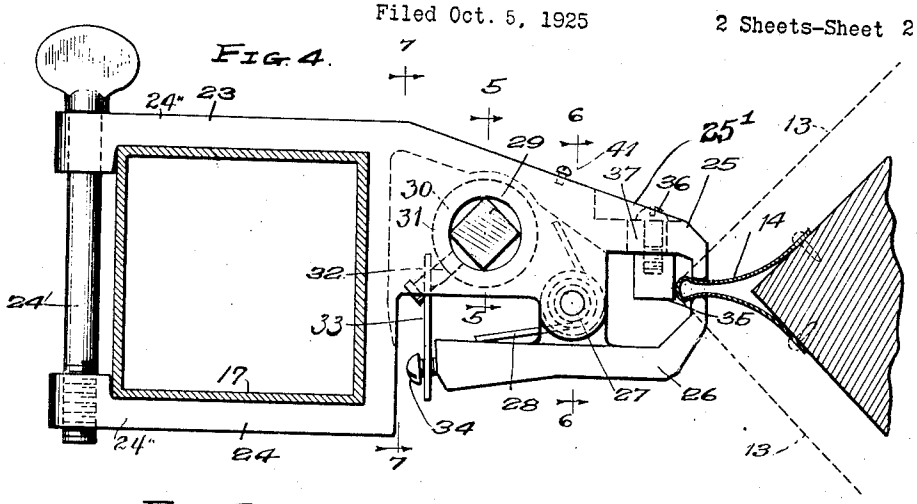


FIG. 5.

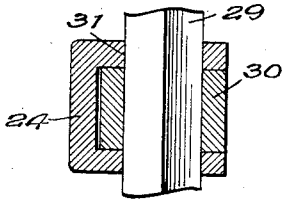


FIG. 6.

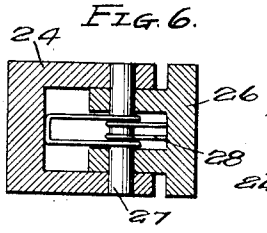


FIG. 7.

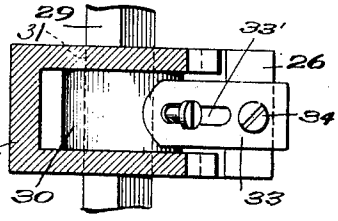


FIG. 8.

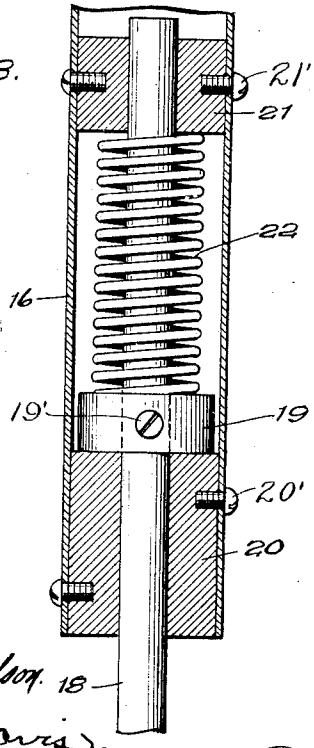
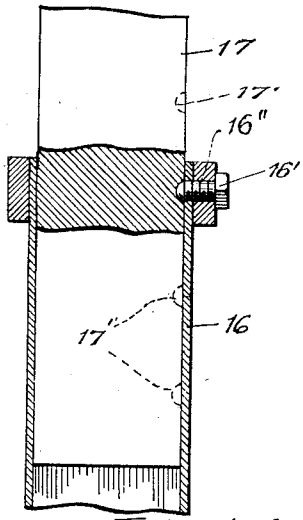


FIG. 9.



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UNITED STATES PATENT OFFICE.

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BEAD HOLDER.

Application filed October 5, 1925. Serial No. 60,557.

This invention relates to building construction and more especially to methods and means for setting bead members and other kinds of strips in place on the walls, as for instance corner beads and various kinds of bead moldings including baseboard and picture moldings, such as shown in the accompanying drawings.

Heretofore, for lack of a suitable tool or instrument, a great deal of time and attention by skilled labor has always been necessary for properly adjusting, trueing up and securing beads and moldings in place by manual means, whereas the present invention involves the use of mechanical means in the form of an extensible tool or strip holding device adapted for ready adjustment, setting and operation by a workman to hold any desired form of bead member in place while it is being attached to the wall.

The main objects of the invention are to provide an improved method and means for positioning and holding beads, moldings and the like while they are being fastening in place; to provide an implement or tool of this character adapted for ready adjustment as to length, whereby it may be set rigidly between the floor and ceiling or between the walls of a room in proper relation to the desired position for the bead or molding; to provide thereon ready means to assure proper trueing up of the device for vertical positioning; to provide readily adjusted fastening thereon for gripping the object to be set in place; to provide for simultaneous release of said fastenings after the bead has been set in place and secured; and to provide such a tool adapted for ready and accurate use by the workman using the same.

An illustrative embodiment of this invention is shown by the accompanying drawings, in which:—

Figure 1 shows an unplastered wall with a picture molding set in place and a baseboard molding being held in place by an instrument embodying this invention.

Fig. 2 is a side elevation of the device showing the use of the instrument for holding the corner bead in vertical position.

Fig. 3 is a plan of the device as used for holding a picture molding or baseboard molding in place.

Fig. 4 is a sectional view of the device taken on line 4—4 of Fig. 2 showing the device set in position for attaching a corner molding in place, this view being on a much larger scale than Figs. 1, 2 and 3.

Figs. 5, 6 and 7 are sections taken on lines 5, 6 and 7 respectively of Fig. 4.

Fig. 8 and Fig. 9 are sections taken on lines 8 and 9 respectively of Fig. 2.

In building construction, where the walls are to be finished by plastering, it is common practice to fasten in position before the plaster is put on certain trimming members such as corner beads, moldings, finishing strips and the like, and then to plaster around all except the face part and to leave the back portions of the strips embedded in the finished wall.

In Figure 1 is shown a flush type grooved picture molding 10 near the top and a finishing strip 11 near the bottom for the baseboard portion 12 which may be of concrete while the upper part of the wall is plastered, the finished surface 13 of the wall being indicated by dotted lines. In Figs. 2 and 4, is shown a corner bead 14 for forming and reinforcing a protruding edge or corner part of the wall in a room having such a corner.

These trimming members 10, 11 and 14 and the like are usually made of thin sheet metal which is somewhat flexible. Hence it is necessary for proper alinement and for the sake of good appearance, to have the bead strips held positively at several points so as to be accurately positioned and properly alined when fastened. Moreover, since the rough walls are likely to be somewhat irregular, the process of setting the strips in true position is often highly exacting and requires a good deal of skill.

Accordingly, I have provided an adjustable length multiple grip holding device, which may be readily set in place in compression and held frictionally between the ceiling and floor or between opposite walls. A series of alined clamps or gripping devices are attached all in like manner to the supporting part or extensible bar of the device, so that to position a strip clamped in the holders is merely a matter of properly setting the support, the latter being rigid and straight throughout its length.

As illustrated in the drawings, the support or alining bar member 15 comprises a

lower metallic tubular portion 16 preferably of square cross section and an upper correspondingly shaped bar portion 17 which fits snugly and telescopes in the member 16, and is secured in a more or less extended position by means of a set screw 16′ which fits in the threaded hole 16″ of member 16 and may be turned to engage in any of the various holes or dents 17′ provided in the member 17. The upper member 17 may be made as a smaller sized metal tube or as a solid wooden pole adapted to fit in the member 16. A broad flat friction bearing 17″ is fixed on the upper end of section 17 to prevent unintended turning of the pole on its axis.

As is shown in Fig. 8, a spring pressed length take-up rod or foot member 18 is mounted in the lower end of the member 16. The rod 18 is provided with a collar 19 held adjustably by the set screw 19′ (see Fig. 8) and is slidable lengthwise in the spaced bushing like stop members 20 and 21 and is pressed outwardly by means of the coiled compression spring 22 between the adjusting rod collar 19 and the upper bushing 21, the bushings 20 and 21 being secured rigidly in the post member 16 by screws 20′ and 21′ respectively and outward movement of said rod being limited by the stop 20.

A series of bead clamps 23 have forked yoke portions 24 which fit embracingly on the square support members 16 and 17 and which may be clamped in adjustable mutually spaced relation by means of the thumb screw 24′ in the tips of the fork arms 24″. The yoke or body portion 24 has an extending fixed jaw 25, and pivoted in coactive relation thereto is a movable jaw 26 which is mounted on a pivot pin 27 and is pressed towards closed position by means of the torsion coil spring 28. Each of the movable jaws for the several clamps 23 may be opened independently of one another, but means are provided, as will be described, for simultaneously opening all of the clamps, so that the finishing strips 10, 11 or 14, or whatever kind of strip is to be set, may be readily locked in the clamps and then instantly released therefrom after it is fastened in place on the wall.

In order to effect simultaneous opening of all the clamp jaws as above referred to, a square key shaft 29 is inserted through similarly apertured cylindrical collar members 30 which are held by said shaft between opposite walls of the hollowed shank portion of the clamp body 24 in alinement with the circular openings 31 in the said walls. Each collar 30 is provided with a headed arm member or screw 32 which engages a longitudinally slotted plate 33 attached loosely by the screw 34 to the rear end of the jaw 26. By reason of the slot 33′, as shown in Figs. 4 and 7, any jaw may be opened independently of the others. The key rod 29 may be turned by any suitable wrench, or by a cross handle 29′ set therein. This bar 29 is adjustable in length at the joint 29″, as will be understood.

To prevent the strips from slipping in the jaws and to accomplish similar clamping relation at all points, stop members 35 are provided to bear against the face of the bead. These stops 35 are held adjustably in the fixed jaws by shifting the holding screw 36 in the screw slot 37. The outer face of the jaw 25 is recessed at 25′ to accommodate the head of screw 36 (see Fig. 4).

In order to facilitate exact vertical setting of the device, a plumb line 40 is suspended at 41 on the jaw 25 of one of the upper clamps and a lower jaw is gage marked to show when the instrument is set square.

In use the support member 15 is extended appropriately and set in position where it is held by the end thrust exerted by the spring pressed rod 18. The finishing strips are held in the clamps and are quickly adjusted into proper position by aptly shifting the post member 15, suitably moving either or both ends. In some instances the strips, as for instance the corner bead 14, Fig. 4, is nailed fast and then the plastering put on, or the strips may be held entirely by the support 15 until they are embedded in the plaster which soon sets rigidly. When the work is finished, the clamps 23 are opened by turning the square operating rod 29. Then pressure is applied lengthwise to the support 15 to compress the spring 22 and loosen the post for removal.

Although several variations of method and but one specific structural embodiment of this invention are herein shown and described, it is to be understood that numerous details of the construction shown and some of the details of the methods described may be altered or omitted without departing from the spirit of this invention as defined by the following claims.

I claim:

1. A bead or molding positioning device comprising a telescopically extensible post having a spring pressed end extension member, a series of work holding clamps slidably mounted in parallel relation on the post and each having a stationary jaw, a rotatable collar carried by said jaw, a spring pressed jaw hinged to the first said jaw and connected to said collar, and a rod slidably engaging in said collars in co-rotary relation thereto for simultaneously rotating the collars to open the clamps.

2. A bead or molding positioning device comprising a telescoping extensible post having a spring pressed end extension mem-

ber, a series of work holding clamps slidably mounted in parallel relation on the post and each having a stationary jaw, a rotatable collar, a spring pressed jaw, a link pivoted to the rear end of the spring pressed jaw and in slotted engagement with said collar, and a rod slidably engaging in said collars in co-rotary relation thereto for simultaneously rotating the collars to open the clamps.

3. A bead or molding positioning device comprising an extensible post having ends adapted to frictionally abut against the walls of a room, yielding means urging one of said ends outward and work-holding means on said post for the purpose set forth.

4. A bead or molding positioning device comprising an extensible post having ends adapted to abut against and frictionally engage the walls of a room, yielding means formed and arranged to urge endwise extension of said posts and a series of work-holding clamps slidably adjustable on said post.

Signed at Chicago this 28th day of Sept., 1925.

WAYNE I. NOBLE.