Sept. 23, 1941. R. J. TAYLOR ET AL 2,256,658

FASTENER FOR BUILDING BOARD OR THE LIKE

Filed Dec. 24, 1938

Fig. 1

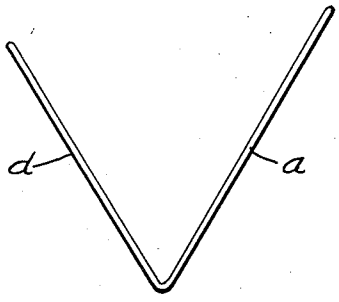


Fig. 4



Fig. 2

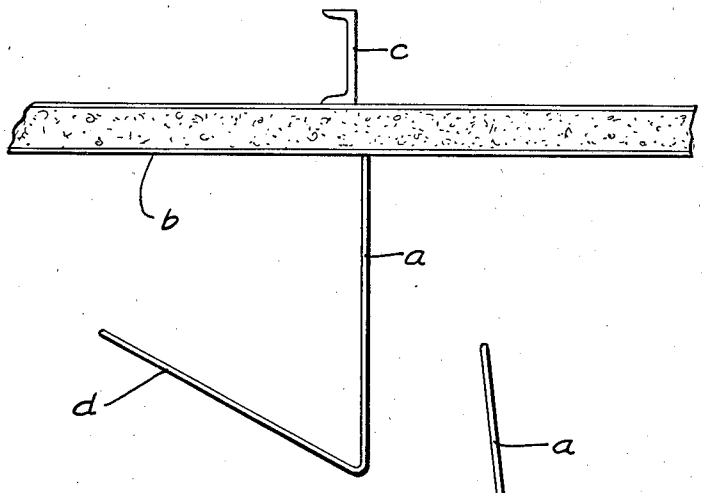
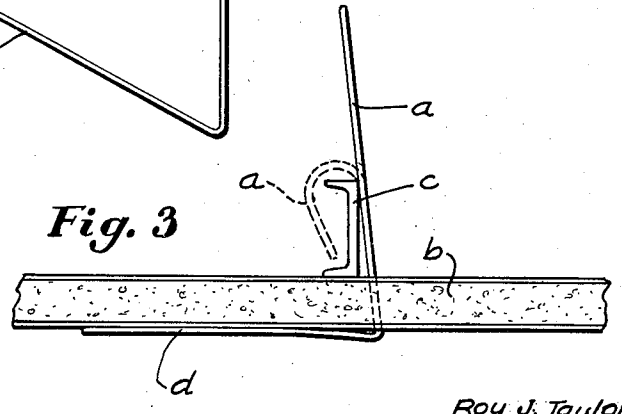


Fig. 3



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FASTENER FOR BUILDING BOARD OR THE LIKE

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Application December 24, 1938, Serial No. 247,592

6 Claims. (Cl. 72—120)

This invention relates to a means for attaching a composite plaster base to metal supports, and more particularly to a device for fastening gypsum lath or the like to metal channels for ceiling construction.

There are many types of clips for fastening gypsum lath to metal supports, but these all have the common fault of supporting the gypsum lath only on the edges and ends. When the first or scratch coat of plaster is applied over a ceiling erected with clips of the conventional type the moisture from the plaster causes a temporary weakening and expansion of the plaster lath with the result that the lath bows downward. This produces a ceiling which has many waves in it which are unsightly and hard to level out. This trouble is particularly prevalent when the practice is followed of doubling back with the second coat before the first coat has set.

To eliminate the waviness of ceilings which have been applied with any of the conventional clips we have perfected a nail or device which firmly holds the lath to the metal runners so that the lath cannot bow, and at the same time the fastening is flexible enough to allow for expansion and contraction without causing cracks in the ceiling.

In the accompanying drawing Fig. 1 is a side view of the fastener.

Figs. 2 and 3 are views showing the manner of applying the same.

Fig. 4 is an edge view of the fastener.

Referring now to the attached drawing Fig. 1 shows a view of our nail which is made of wire stiff enough to let it be driven through the lath and yet not so stiff that it cannot be readily bent around the supporting channel iron as shown in Fig. 3. The head of the nail *d* is preferably, although not necessarily, 2¼ inches long. The shank of the nail *a* is of such a length that it can be driven through the lath *b* and bent around the channel *c* as shown by the dotted lines in Fig. 3. The angle between *a* and *d* is preferably about 65° but may be varied to meet different conditions without departing from the spirit of this invention.

The angle between *a* and *d* should be great enough so that the nail can be readily started through the lath as shown in Fig. 2. It may be started on either side of the supporting channel *c* and close enough to it so that when the head is brought up flush with the lath the shank *a* is brought up against one edge of the supporting channel *c* as shown by the solid lines *a* in Fig. 3. The shank *a* may then be bent by hand or with a pair of pliers to the position shown by the dotted lines *a* in Fig. 3.

As will be seen when the nail or device is driven in the head part *d* will draw up flatly against the lath, as shown in Fig. 3, but nevertheless a certain amount of sliding action is permitted. The operation spreads the angle from its original 65° to a maximum of 90°, but leaves a spring action of the angle to hold the lath snugly against the metal member. After the application and setting of the plaster the nail is deeply embedded in the mass and is immovable to all practical purposes. The tie bent around the metal member *c* then becomes the more flexible of the arms of the nail and will have sufficient spring and slip to allow for minor movements of setting or expansion and contraction of the structure, without transferring the movement to the plaster wall, thereby eliminating many cracks which often develop from this action.

We claim:

1. The combination with a wall board and supporting member, of a fastener comprising a piece of wire bent to form a penetrating arm which is driven substantially perpendicularly through the wall board and bent around the supporting member and another arm normally at an acute angle to the penetrating arm and which when the latter is driven lies substantially flat against the surface of the wall board opposite to the supporting member.

2. A fastener for a wall board or the like, comprising a V-shaped piece of wire, one arm of which is a penetrating arm adapted to be driven through the wall board and bent around a wall board supporting member after such penetration and the other arm of which is an outer or holding arm, the junction of the two arms having sufficient flexibility to permit them to assume a greater angle when the penetrating arm is so driven and bent.

3. A fastener for securing a wall board to a supporting member comprising a piece of spring metal bent at less than a right angle to form two arms, one a penetrating or nail arm adapted to be driven through the wall board for engagement with the supporting member and the other a driving or head arm, said arms being located in substantially a single plane and when driven springing to a greater angularity so the head arm will lie closely against the wall board into which the other arm is driven.

4. The combination with a wall board and supporting member, of a fastener comprising a piece of wire bent to form a penetrating arm which is

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driven substantially perpendicularly through the wall board and bent around the supporting member, and another arm normally at an acute angle to the penetrating arm and which when the latter is driven lies substantially flat against the surface of the wall board opposite to the supporting member, both of said arms being located in substantially a single plane.

5. A wall board construction comprising a supporting member, a penetrable wall board in combination with a resilient securing member adapted to affix the wall board to the supporting member, said securing member V-shaped, consisting of diverging shank portions, one of said shank portions perforating the wall board at substantially a right angle and having frictional engagement with the surface of the perforation, the other shank portion substantially flat against a face of the wall board and stressing the first-mentioned shank portion, whereby the securing member is affixed in the penetrable wall board, the first-mentioned shank portion deformably affixed to the supporting member, the wall board thereby resiliently secured to the supporting member by virtue of the stress imparted to the securing member.

6. As an article of manufacture, a securing member adapted for erecting penetrable wallboard and to resiliently urge the wallboard towards the supporting members against which it is mounted, said securing member comprising a substantially straight elongated resilient metal member distorted to provide divergent shanks extending at an acute angle one with respect to the other from a common apex, with the divergent shanks lying in substantially the same plane diverging one from another at an angularity of the order of 65°, one of said shanks adapted to be forced through a wallboard at substantially right angles to the face thereof and have its outer end secured to a supporting member whereby the wallboard may be resiliently mounted between the other diverging shank and the supporting member.

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