June 3, 1930. W. E. WHITE 1,761,323

LATH CLIP

Original Filed May 17, 1928 2 Sheets-Sheet 1

Fig. 1

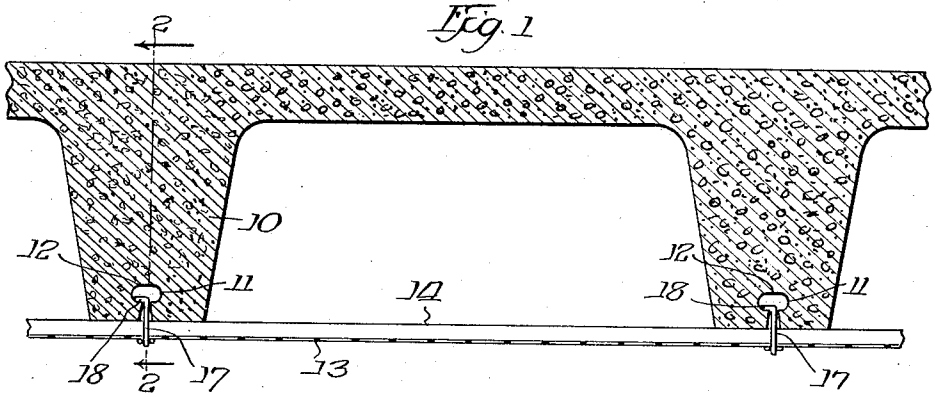


Fig. 2

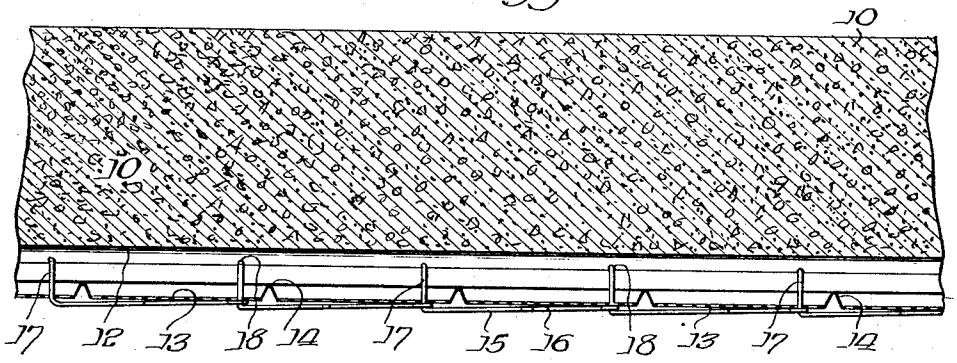
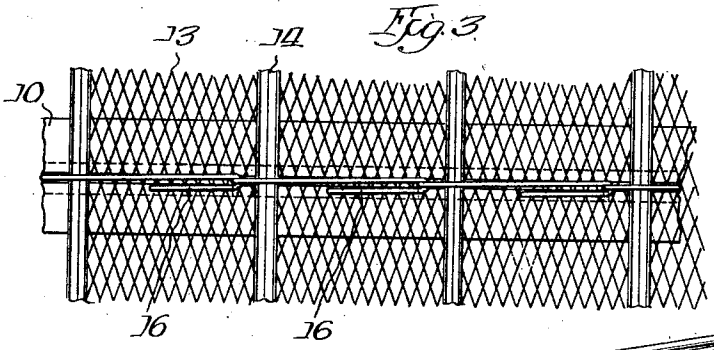


Fig. 3



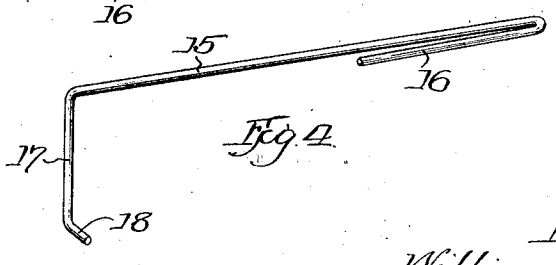


Fig. 4

Witness:
Geo. C. Wrisen

Inventor
William E. White
By Murray & Murray
Attys

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Fig. 5.

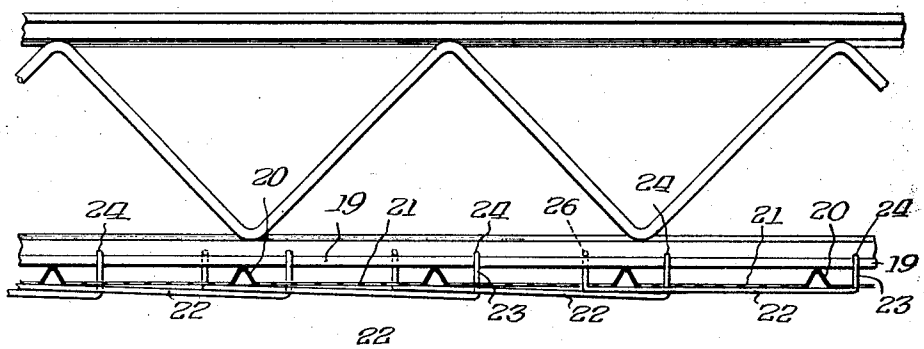


Fig. 6

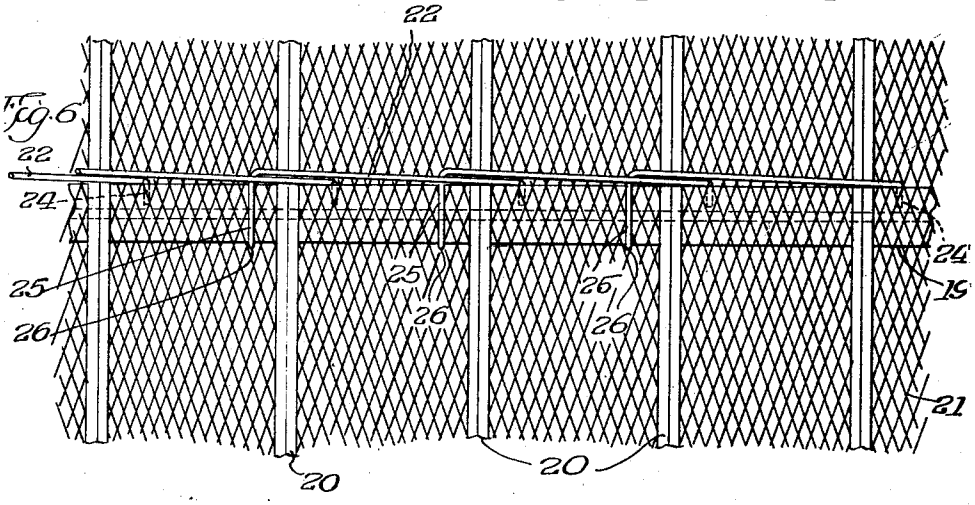
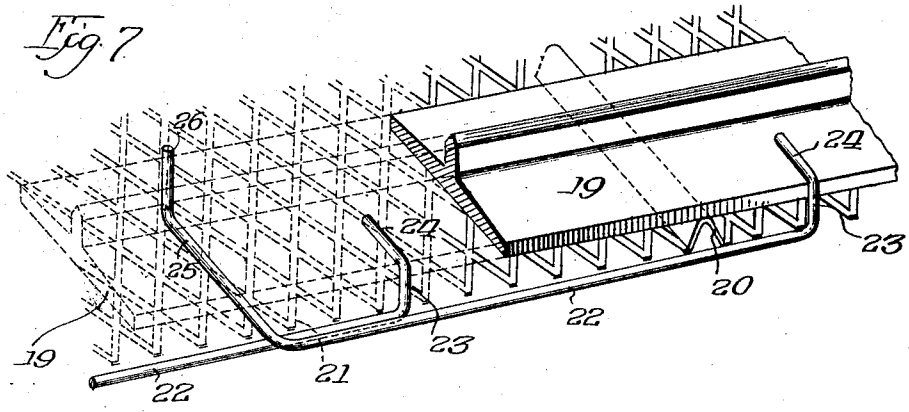


Fig. 7



Witness:
Ed. C. Orrin

Inventor
William E. White
By Murray & Murray Attys

Patented June 3, 1930 1,761,323

UNITED STATES PATENT OFFICE

WILLIAM E. WHITE, OF CHICAGO, ILLINOIS, ASSIGNOR TO KALMAN STEEL COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE

LATH CLIP

Application filed May 17, 1928, Serial No. 278,457. Renewed November 18, 1929.

My invention relates to concrete construction and particularly to novel means adapted to be used for attaching metal lath and similar reticulated structures.

In ceiling construction as commonly installed the ribbed metal lath is laid against the lower surface of the ceiling supporting structure whether it be in the form of concrete ribs, beams or girders or a suspended ceiling, and as the lath must be secured in place from beneath, a multitude of expedients have been suggested for that purpose, all except a few of which have been abandoned. The practice of providing nails, the heads of which are imbedded in concrete with the ends projecting from the face thereof is still in common use but is objectionable for the particular reason that as the nails must be hammered over after the lath has been placed in position, the body of the lath is bent upwardly into direct contact with the concrete and out of its original plane thus reducing the bond with the plaster along the line of attachment to the concrete.

It is also customary to provide a continuous slot of some form in the concrete or concrete rib and securing the lath in the grooves by means of depending wires adapted to be twisted. The objection to the last method is its relatively great cost in time, although there is an additional objection to the projected twisted ends of the wire.

My improvement contemplates a method of lath attachment in which the objectionable features are eliminated. The lath is supported throughout its entire area with the body thereof in the same plane and the labor of installing is reduced to a minimum. The attaching structure consists merely of a length of light gauge wire so shaped that its hooked end may readily be projected through the interstices in the lath, and, due to the arrangement, the exact point of insertion through the lath is of no importance. This insures rapidity of action and a greatly reduced cost of installation.

The invention will be more readily understood by reference to the accompanying drawings, in which—

Fig. 1 is a sectional view through a ribbed ceiling to which my improvement has been applied;

Fig. 2 is a sectional view on the line 2—2 of Fig. 1;

Fig. 3 is a bottom plan view;

Fig. 4 is a perspective view of one of the clips;

Fig. 5 is a view similar to Fig. 2 showing the application of the improvement to a different form of ceiling construction;

Fig. 6 is a bottom plan view of the construction shown in Fig. 5, and

Fig. 7 is a perspective view, somewhat enlarged, of the construction shown in the two preceding figures.

In the drawings and referring particularly to Figs. 1 to 4, I have illustrated a concrete ceiling having ribs 10, in the lower faces of which are seated the sheet metal channel-forming members 11 which act to provide a continuous T head slot 12 in the face of the concrete. The shape of the slot is not of supreme importance as any means that will provide an undercut groove or slot in the face of the concrete will function properly. Preferably the slot should have a flaring opening such as shown in order to facilitate the entrance of the attaching clip.

The lath is of common form, consisting of a reticulated body 13, and spaced, V-shaped stiffening ribs 14. The lath is installed in such position that the ribs serve to space the body of the lath from the face of the concrete.

The clip of my invention consists of a length of wire having a straight portion 15, a rebent portion 16 forming a loop, a right angular portion 17 at the opposite end and a hook or lateral projection 18 at the extremity. In operation, the parts 17, 18 are projected through an opening in the lath and into the slot in the concrete, after which the clip is rotated 90 degrees into the position shown. The next clip is then passed upwardly through the loop 16 and into a similar engaging position. Due to the length of the loop, it will be seen that the position of the next adjacent clip is unimportant and this is a valuable expedient where the clip is used

with lath in which the ribs are spaced differently from the spacing for which the clips were intended. It is also important because at the junction of two sections of lath where the sections are overlapped, it is sometimes necessary to select registering openings that may not coincide with the exact end of the clips.

Preferably the projection 18 will be proportioned so that a slight distortion is necessary when the clip is swung from the installing to the final positions. It is also desirable that the length of the parts 17 be such that a slight tension must be put on the parts to cooperate with the next adjacent clip. At the terminal point of the cooperating clips a twisted wire or some similar expedient is employed for holding the free end of the last clip.

In the construction shown in Figs. 5 to 7 inclusive, I have illustrated a trussed girder having a flanged chord 19. The lath is of identical construction, having ribs 20 lying against the bottom face of the chord and a reticulated body 21. The clips are very similar to those already described, having a straight portion 22, an angular portion 23 adapted to extend upwardly through the mesh of the lath, and an angular end projection 24 adapted to overlie the flange of the girder. At its opposite end the wire is bent at right angles to provide a portion 25 which terminates in an upward projection 26 adapted to pass through the mesh of the lath and lie along the opposite flange of the girder. Adjacent clips are interlocked with the chord in a similar manner, the straight portions of the clips underlying and holding in place the otherwise free ends of the preceding clips.

The construction likewise provides for practically unlimited selection of points of engagement which insures rapid application of the clips. Adaptations of the structure to different forms of ceilings will readily suggest themselves, and I do not wish to be limited except as indicated in the appended claims.

I claim:

1. In ceiling construction, the combination of a support having a continuous projection, ribbed lath so mounted that the ribs space the body of the lath from the support, and interlaced wire clips, each clip having a shank terminating in a hook at one end adapted to pass through the body of the lath and engage said projection and at the other end shaped to engage with an adjacent cooperating clip.

2. In ceiling construction the combination of a lath support having a continuous undercut slot therein, ribbed lath so mounted that the ribs contact and space the lath from the support, and a plurality of interlaced wire lath clips, each clip having a shank terminating in an upstanding hook at one end adapted to be inserted through an opening in said lath to engage the slot in said support, and the other end being bent to engage an adjacent cooperating clip.

3. In ceiling construction the combination of a lath support having a continuous undercut slot therein, ribbed lath so mounted that the ribs contact and space the lath from the support, and a plurality of interlaced wire lath clips, each clip having a shank terminating in an upstanding hook at one end adapted to be inserted through an opening in said lath to engage the slot in said support, by rotary movement and the other end being bent to engage an adjacent cooperating clip.

4. In ceiling construction the combination of a lath support having continuous undercut slot therein, ribbed lath so mounted that the ribs contact and space the lath from the support, and a plurality of interlaced wire lath clips, each clip having a shank terminating in an upstanding hook at one end adapted to be inserted through an opening in said lath to engage the slot in said support, and the other end being bent to engage an adjacent cooperating clip, each of said adjacent clips being secured to the same support.

5. In ceiling construction the combination of a lath support having a continuous undercut slot therein, ribbed lath so mounted that the ribs contact and space the lath from the support, and a plurality of interlaced wire lath clips, each clip having a shank terminating in an upstanding hook at one end adapted to be inserted through an opening in said lath to engage the slot in said support, by rotary movement and the other end being bent to engage an adjacent cooperating clip, the ribs in said lath lying at a right angle to the slot in said support.

6. In ceiling construction the combination of a lath support having a continuous undercut slot therein, ribbed lath so mounted that the ribs contact and space the lath from the support, and a plurality of interlaced wire lath clips, each clip having a shank terminating in an upstanding hook at one end adapted to be inserted through an opening in said lath to engage the slot in said support, and the other end being bent to engage an adjacent cooperating clip, each of said adjacent clips being secured to the same support, the ribs in said lath lying at right angles to said interlocked adjacent clips.

In testimony whereof I have affixed my signature.

WILLIAM E. WHITE.