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CLIP FOR PAPER-BACK LATHS

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5 Claims. (Cl. 72-118)

This invention relates to a new and useful clip for fastening laths, particularly paper-back laths, to steel furring bars or channels.

- Heretofore, various wire clips have been sug-5 gested for supporting and tying on paper-back metal reinforced laths upon furring channels on ceilings or on side walls. However, these clips have had serious disadvantages which have often resulted in inefficient application of the lath
- 100 sheets and which have slowed up the application of the lath. For example, the clips have not been adjustable in length and certain of them have required both ends to be hooked over the furring channel, which operation is "blind" so far as
- 15: applicator is concerned. Other clips having only one end hooked over the furring channel, would dangle in place and possibly become unhooked unless the applicator held the clip in position while preparing to insert the next successive clip
 20 having locking means to lock the free end of the formed the clip.
- first clip. Therefore, it is an object of my invention to provide a simple and inexpensive clip which will hold sheets of the lath snugly against the furring
- 25 channels under tension. A further object of the invention is the provision of a clip which is adjustable as to length.
 - A further object of the invention is the provision of a wire clip formed with a visible locking
- 30 loop at one end thereof through which an end of the next successive clip can be inserted and positively locked in place, thus providing a series of successive interlocked clips, assuring a positive and firm positioning of the lath.
- 35: A further object of the invention is the provision of a wire clip such as described which can be easily and conveniently mounted in place for supporting paper-back metal reinforced laths, and which before it is interlocked with its next
- 40^o successive clip, can be temporarily positioned by forcing a loop-shaped projection intermediate its length under portions of the metal reinforcing of the paper lath, thus freeing both hands of the applicator, and tending to speed up the appli-45 cation of the laths.

A still further object of the invention is the provision of a wire clip which is extremely convenient in the so-called "spotting" or preliminary positioning of the laths due to the fact that one

50 end only of the clip need be applied to a furring channel, the clip being temporarily positioned by inserting an adjustable loop portion intermediate its ends under the metal reinforcing of the lath.

55 These and various other objects and advantages

will be readily understood from the following description taken in connection with the accompanying drawing of a preferred embodiment of the invention, in which modifications may be made without departing from the scope of the 5 appended claims.

In the drawing, Fig. 1 is a perspective view looking upwards at a fragment of a paper-back metal reinforced lath positioned upon a ceiling furring channel by a series of clips embodying my 10: invention.

Fig. 2 is a section taken substantially upon the line 2-2 of Fig. 1.

Fig. 3 is a section taken substantially on the line 3-3 of Fig. 1.

Fig. 4 is a ceiling perspective view of a single clip and a fragment of a channel support shown in their relative positions for purposes of clarity.

In these figures, a paper-back metal reinforced lath 10 is illustrated as having V-shaped ribs 12, 20 metal rods 14 running transverse to the said ribs and paper backing 16. The lath 10 illustrated is now being sold under the trade-mark "Ecod" and there are various other laths obtainable of somewhat generally similar structure. The lath 25 10 is generally marketed in strips about eight feet long and about two and one-half feet wide and will ordinarily form a plaster backer for ceilings and side walls by being clipped to furring channels such as U-shaped furring channels 18 shown 30 in the drawing.

As clearly shown in Figs. 1 and 2, this general type of paper-back metal reinforced lath 10 will ordinarily be formed with its paper 16 in a series of rolling corrugations forming alternate transverse grooves 20 and ridges 22, the metal stiffening wires or rods 14 running longitudinally of the lath 10 through the ridges 22, thereby leaving spaces indicated as 24 between the rods 14 and the bottoms indicated as 26 of grooves 20. 40

My new and improved clip indicated generally as 28 will normally be formed integrally from a single piece of relatively stiff but manually deformable wire and will have a shank portion 30 having two parts 32 and 33 lying in a straight 45 line and an expansible loop indicated as 34 intermediate the said parts 32 and 33, the said parts 32, 33 and loop 34 ordinarily lying in a single plane, which when the clip 28 is in position will be substantially parallel to the general plane of 50 latch 10. As indicated, expansible loop 34 is preferably formed in an inverted V-shape.

A visible turn-back or locking loop **36** is formed at one end of clip **28** which will normally lie in the same plane as expansible loop **34** and 55

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at the other end of clip 28 is formed a hooking member 38 adapted to be hooked over and to encompass portions of channel members 18 as clearly illustrated in the figures. The hooking 5 member 38 in its preferred form as shown, will generally be formed with a leg member 40 which is perpendicular to shank part 32, a transverse leg member 42 which is formed at right angles to leg member 40 and which is substantially par-10 allel to loop 34 and a relatively short locking leg member 44 formed at right angles to transverse leg 42 and substantially parallel to leg member 40; all the leg members 40, 42 and 44, will ordinarily lie in a single plane which is perpendicular 15 to the plane in which expansible loop 34 and locking loop 36 lie.

In the perspective figure, the lath 10 is shown as being mounted in its ceiling position and it is usual for two men to take a sheet of the lath 19, 20 place it in its approximate position and then "spot" the same to its approximate position, temporarily holding the same there with four or five temporary fastening means. By virtue of my new

- and improved clip 28, in "spotting", each man can 25 hold one end of the sheet of lath 10 by one hand and with the other insert locking leg member 34 of clip 28 through paper 16, twisting the clip around until hook member 38 is hooked over channel 18 in the position illustrated in Fig. 2, 30 and then insert expansible loop 34 into any con-
- venient space 24 in grooves 20 between the rods 14 and the bottoms 26 of grooves 20; the operation of inserting the clip and locking the same with its loop 34 under rod 14, in a one-handed 35 operation and can be done easily and convenient-
- ly and will normally tension lath 10 against channel member 18 because expansible loop member 34 will ordinarily be forced slightly out of its normal plane under tension underneath one or 40 more of the rods 14. This clearly facilitates the
- preliminary "spotting" or positioning of the lath. When the sheet of lath 10 is in proper position, a longitudinally interlocked series of clips 28, as illustrated in Fig. 1, will be placed in po-45 sition by a hooking operation similar to the pre-
- liminary "spotting" operation, with the exception that after a clip 28 has been positioned with its loop 34 placed under one or more of the rods 14 under tension, the next successive clip 28A will 50 be positioned with its hooking member 38 interlocked with locking loop 36 of the preceding clip 28, which locking loop 36 can be bent back upon
- itself by a pair of pliers, as indicated in Fig. 1, to give a positive lock. When various sheets of 55 the lath 10 are joined together with some over-
- lap, it will be recognized that the clips 28, being adjustable by virtue of the expansible loop 34 can be lengthened so that they can always be positioned in an appropriate groove 20 under 60 rods 24. By varying the arrangement of the
- hooking member 38, particularly the length of leg member 40, it will be recognized that considerable tension or pressure can be exerted against lath 10 by shank 30 of the clips 28.
- It will be recognized that the sheets of lath 10 65 when tied one to another and to the channels 18 by clips 28 will form a plaster backing surface substantially unitary in character which is independent of expansion or conntraction move-70 ments of channels 18.

It is to be understood that while the illustrated form of the invention which I have described, represents a preferred embodiment, I do not wish to limit myself to the details as shown 75 since it is obvious that the same may be consid-

erably varied without departing from the spirit of the invention; also it will be apparent that expansible and adjustable clips of this general nature with expansible loops and visible locking loops would efficiently serve to position various 5 plaster boards, having holes cut therein, or to position various expanded metal laths, the adjustability of the length of the clip being an important element of my invention; also it will be apparent to those skilled in the art that while 10 the precise form of the hooking member 38 illustrated aids in firmly and non-rotatably positioning the clip, that various modifications of hooking member 38 can be made, including a reversal of parts and including having leg member 40 15 and expansible loop member 34 on opposite sides of shank part 32, although maintaining their parallel relation, and also including forming the hooking member so that it will fit over a round furring bar, without avoiding the essence of my 20 invention as defined and claimed in the appended claims.

What I claim is:

1. An integral readily deformable wire clip for mounting and maintaining sheet laths in posi- 25 tion upon furring bars which includes an elongated shank portion, an expansible loop formed intermediate the ends of said shank portion and lying in a single plane, a hook shaped member for hooking over the furring bar, formed at an 30 end of said shank member lying in a single plane which is perpendicular to the plane of said loop and a turn-back portion formed at the other end of said shank portion forming an open locking loop. 35

2. An integral readily deformable wire clip for mounting and maintaining sheet laths in position upon furring bars which includes an elongated shank portion, an expansible loop formed intermediate the ends of said shank portion and 40 lying in a single plane, a hook shaped member for hocking over the furring bar, formed at an end of said shank member lying in a single plane which is perpendicular to the plane of said loop and a turn-back portion formed at the other 45 end of said shank portion forming an open locking loop, said hook shaped member including a leg member perpendicular to said shank member, a transverse leg member perpendicular to said first leg member and parallel to the plane of said 50 expansible loop and a short locking leg member parallel to said first leg member.

3. An integral readily deformable wire clip for mounting and maintaining paper metal reinforced sheet laths in position upon furring bars 55 which includes an elongated shank portion, an expansible loop formed intermediate the ends of said shank portion and lying in a single plane, a hook shaped member for hooking over the furring bar formed at an end of said shank mem- 60 ber lying in a single plane which is perpendicular to the plane of said loop and a turn-back portion formed at the other end of said shank portion forming an open locking loop, said locking loop lying generally in the same plane as said 65 expansible loop.

4. An integral readily deformable wire clip for mounting and maintaining paper metal reinforced sheet laths in position upon furring bars which includes an elongated shank portion, an 70 expansible loop formed intermediate the ends of said shank portion and lying in a single plane. a hook shaped member for hooking over the furring bar formed at an end of said shank member lying in a single plane which is perpendicu- 75

lar to the plane of said loop and a turn-back portion formed at the other end of said shank portion forming an open locking loop, said locking loop lying generally in the same plane as said 5 expansible loop, said hook shaped member including a leg member perpendicular to said shank member, a transverse leg member perpendicular to said first leg member and parallel to the plane of said expansible loop and a short locking 10 leg member parallel to said first leg member.

5. An integral readily deformable wire clip for mounting and maintaining paper metal reinforced sheet laths in position upon furring bars which includes an elongated shank portion, an 15 expansible loop of an inverted V-shape formed intermediate the ends of said shank portion and lying in a single plane, a hook shaped member for hooking over the furring bar formed at an end of said shank member lying in a single plane which is perpendicular to the plane of said loop and a turn-back portion formed at the other end of said shank portion forming an open locking loop, said locking loop lying generally in the same plane as said expansible loop, said hook shaped member including a leg member perpendicular to said shank member, a transverse leg member perpendicular to said first leg member and parallel to the plane of said expansible loop and a short locking leg member parallel to said first leg member.

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