Feb. 11, 1930. G. F. PAWLING 1,746,440

BUILDING CONSTRUCTION

Filed Nov. 27, 1925

Fig. 1.

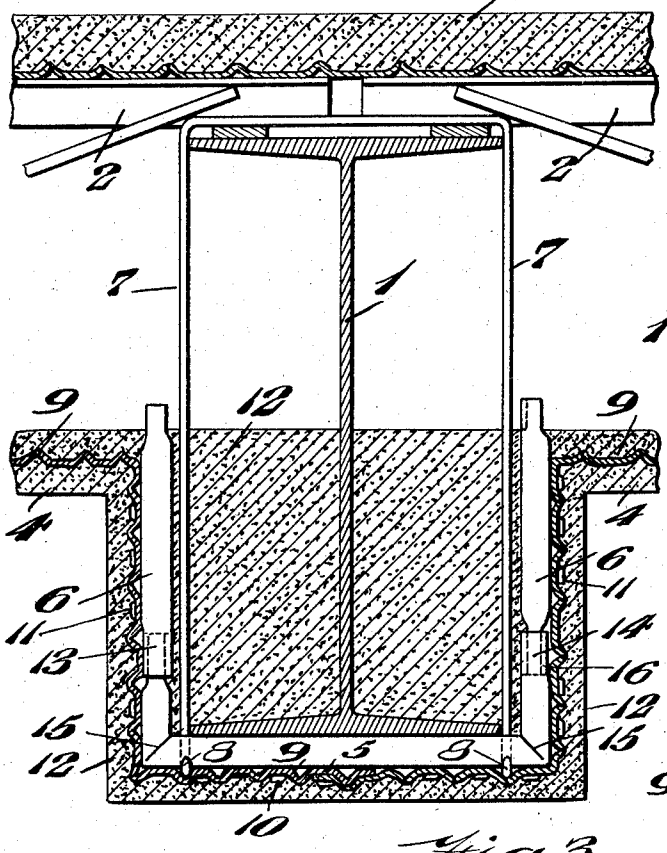


Fig. 2.

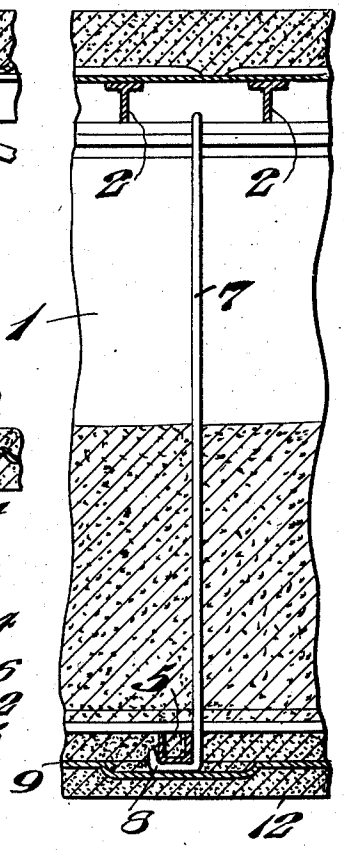


Fig. 3.

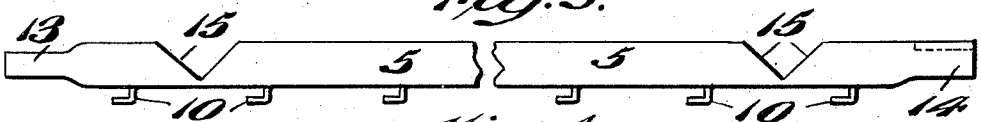


Fig. 4.

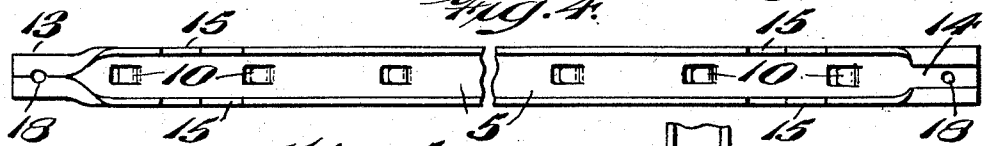


Fig. 5.

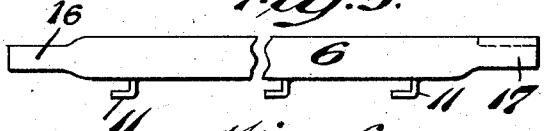


Fig. 6.

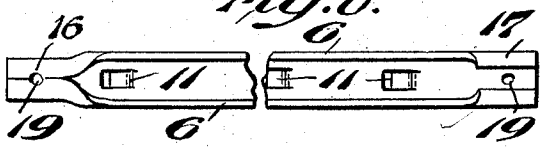
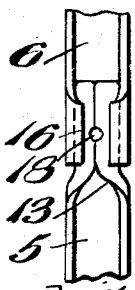


Fig. 7.



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UNITED STATES PATENT OFFICE

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BUILDING CONSTRUCTION

Application filed November 27, 1925. Serial No. 71,535.

This invention, stated in its broadest terms, relates to building construction and has more especial relation to the erection of structural members such as floor and ceiling girders or beams and the manner of concealing same with a concrete surfacing.

As at present practiced, commercially considered and after girder or beam erection, it is customary and in fact necessary in accordance with concrete engineers' methods, to erect around the beams or girders a temporary wooden structure (as used in all concrete work) to sustain the concrete pour for concealing said beams or girders. Practice dictates that this is a relatively expensive procedure since not only does it require expensive material for temporary use but skilled mechanics in addition are essential, to say nothing of the labor entailed after the set of the concrete in tearing down the temporary wooden structure.

The leading object of the present invention is to overcome the above described disadvantageous features and provide a building structure of the character under discussion in which first: all temporary wooden supports are eliminated thus expediting working conditions, reducing cost of erection, eliminating skilled workmen and materially reducing erection costs; second: providing a pressed steel metal lath support so constructed at the mill that it is ready for being bent and fitted beneath the lower part of a beam or girder and maintained in position without the use of nails, wire, or like mediums (requiring time and expense) to support expanded or other metal lath. Other and further objects reside in the provision of general details of construction and arrangement and combination of parts for attaining the results sought by the foregoing objects.

Other and further objects not at this time appearing will be hereinafter more fully set forth.

The invention consists of the novel construction hereinafter described and finally claimed.

The nature, characteristic features and scope of the invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, and in which:

Fig. 1, is a fragmentary view, in section, illustrative of a beam or girder concealed in accordance with the present invention.

Fig. 2, is a view in section taken at right angles to Fig. 1.

Fig. 3, is a view in side elevation of one of the metal lath supports shown in Fig. 1.

Fig. 4, is a top or plan view of Fig. 3.

Figs. 5 and 6 are side and plan views respectively of auxiliary metal lath supports; and

Fig. 7, is a detail view illustrative of the manner of attaching together the ends of the main and auxiliary metal lath supports.

For this purpose of illustrating my invention I have shown in the accompanying drawings one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of the instrumentalities as herein shown and described.

In the drawings and referring now more particularly to Figs. 1 and 2, the reference numeral 1 designates a beam or girder as usually employed in floor and ceiling building construction. Such beams or girders are spanned by any suitable joist as for instance skeletonized joist 2 such as exemplified in various of my pending applications for patents and which forms no part of the present invention. Any conventional form of flooring, as concrete 3, may be employed. In formation of the concrete ceiling, designated 4, in Fig. 1, obviously it is essential to conceal the bottom of girders 1 and this is conventionally practiced by constructing a wooden structure beneath the beam or girder bottom and providing a concrete fill. According to my novel structure, however, I provide metal lath supports 5 formed of sheet metal and stamped from a single blank in the form shown in Figs. 3 and 4, and also auxiliary

metal lath supports 6 as shown in Figs. 5 and 6. These are formed around the bottom of the beams or girders, the ends fitted together, telescopic fashion, and the supports 5 sustained by inverted, U-shaped wire members 7 which rest upon a beam or girder top and depend therefrom and have their hooked ends 8 engage beneath the metal lath supports 5. Thereafter the usual metal lath 9 is caused to engage the clips 10 and 11 of the supports 5 and 6 by causing the slits or apertures therof to engage said clips 10 and 11. The concrete fill 12 which not only forms the ceiling but conceals the beam or girder bottoms is then poured without the employment of any temporary wooden structure heretofore necessary thus greatly expediting erection and materially reducing cost thereof. In order to accomplish this result I fabricate special metal lath supports 5 and 6 as above mentioned. The special form of support 5, as shown in Figs. 3 and 4 is stamped from a single piece of sheet metal, U-shaped fashion with the clips 10 struck out from the bottom thereof. One end of each support is contracted by folding or bending to form a nib or projection 13 and the opposite end is folded or bent over to form a socket 14. At suitable intervals the side walls of each member 5 are oppositely stamped out to form V-shaped openings or vents 15. Thus by placing a support 5 beneath a girder or beam 1 and bending same vertically at each end, about said V-shaped vents 15, the position shown in Fig. 1 is attained. The nib 16 of auxiliary support 6 is then fitted to socket 14 of support 5 and the socket 17 of a second support 6 fitted to the nib or projection 13 of support 5 all as very clearly seen in Figs. 1 and 7. While it is not ordinarily necessary to secure, by pins or the like, said fitted ends together, I provide apertures 18 and 19 in said supports 5 and 6 should it be desirable so to do.

It will now be apparent that I have devised a novel and useful construction which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description and while I have in the present instance shown and described the preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

What I claim is:

1. In a building construction including a beam or girder for floor support, an inverted U-shaped member having hook-like ends carried by said beam or girder, a main metal lath support having a weakened portion adjacent each end suspended from said member and having said weakened portions upturned, an auxiliary metal lath support telescopically connected with the free ends of said main metal lath support, metal lath formed around and secured to said auxiliary and main supports and a plastic fill covering said beam or girder.

2. In a building construction including a beam or girder for floor support, an inverted U-shaped member having hook-like ends carried by said beam or girder, a main metal lath support having a weakened V-shaped portion adjacent each end suspended from said member and having said weakened portions upturned, an auxiliary metal lath support telescopically connected with the free ends of said main metal lath support, metal lath formed around and secured to said auxiliary and main supports and a plastic fill covering said beam or girder.

3. In a building construction including a beam or girder for floor support, an inverted U-shaped member having hook-like ends carried by said beam or girder, a main metal lath support having a weakened portion adjacent each end suspended from said member and having said weakened portions upturned, an auxiliary metal lath support paralleling said beam or support telescopically connected with the free ends of said main metal lath support, metal lath formed around and secured to said auxiliary and main supports and a plastic fill covering said beam or girder.

4. In a building construction including a beam or girder for floor support, an inverted U-shaped member having hook-like ends carried by said beam or girder, a main metal lath support having a weakened portion adjacent each end suspended from said member and having said weakened portions upturned, an auxiliary metal lath support telescopically connected by means of reduced, projected and socket-like ends telescopically fitted with the free ends of said main metal lath support, metal lath formed around and secured to said auxiliary and main supports and a plastic fill covering said beam or girder.

5. In a construction of the character stated a main support for metal lath comprising a member of U-shaped cross-section having metal lath accepting clips struck out from the bottom thereof and having weakened side walls adjacent each end thereof to enable said ends to be bent substantially at right angles to the body portion thereof.

6. In a construction of the character stated a main support for metal lath comprising a member of U-shaped cross-section having metal lath accepting clips struck out from the bottom thereof and having V-shaped weakened side walls adjacent each end thereof to enable said ends to be bent substantially at right angles to the body portion thereof.

7. In a construction of the character stated a main support for metal lath comprising a member of U-shaped cross-section having

metal lath accepting clips struck out from the bottom thereof and having weakened side walls adjacent each end thereof to enable said ends to be bent substantially at right angles to the body portion thereof and having at one end a contracted projection and at its opposite end a socket like portion.

8. In a construction of the character stated a main metal lath support comprising a member of U-shaped cross-section having ceiling metal lath holding clips struck out therefrom, the opposed side walls of said member being weakened at each end for bending at right angles to the body thereof, one end of said member being contracted to form a projection and the other end having a socket, and a pair of auxiliary supports having similar clips and similar ends, which ends have telescopic fit with the ends of the main support.

9. A metal lath supporting member for use around a structural member, said supporting member being of U-shaped cross section and having its side walls notched to enable bending thereof to fit the structural member and having at one end a contracted projection and at the opposite end a socket like portion.

10. In a building construction including a beam or girder for floor support, a main metal lath support carried by said beam or girder and having a weakened portion adjacent each end with ends upturned, an auxiliary metal lath support telescopically connected with the free ends of said main metal lath support, metal lath formed around and secured to said auxiliary and main supports, and a plastic fill covering said beam or girder.

11. In building construction the combination of a structural member, a furring strip of an inherently rigid structural shape having a web portion and a reinforcing rib or flange, said rib or flange being notched out to permit bending to fit the structural member, and said web portion having metal lath accepting clips struck out from the bottom thereof together with metal lath secured to said strip, said strip and said lath being bent to fit the member, and means for fastening the strip with the lath attached to said structural member.

In testimony whereof, I have hereunto signed my name.

GEORGE F. PAWLING.