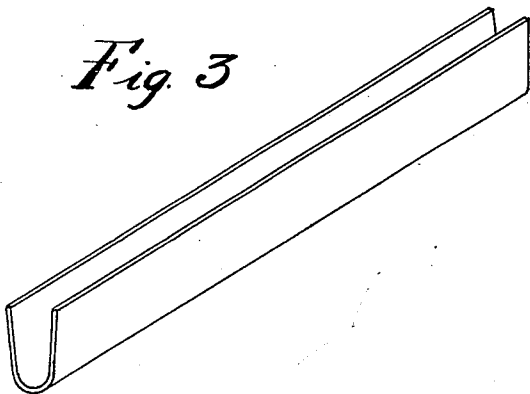
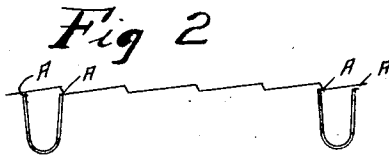
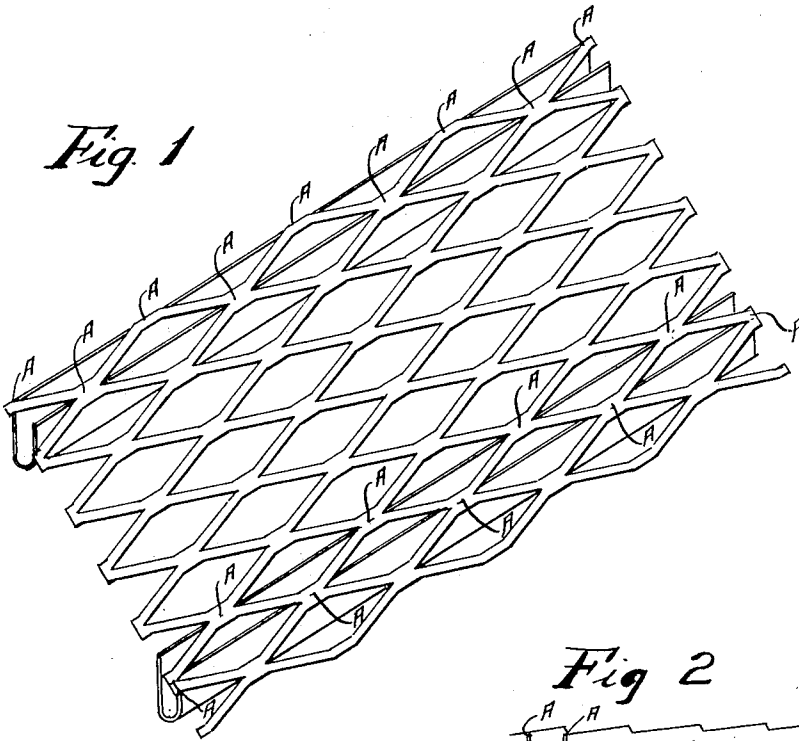


H. E. WHITE.  
METALLIC LATHING AND CONCRETE REINFORCING STRUCTURE.  
APPLICATION FILED JAN. 13, 1909.

945,656.

Patented Jan. 4, 1910.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HERBERT E. WHITE, OF YOUNGSTOWN, OHIO, ASSIGNOR TO GENERAL FIREPROOFING COMPANY, OF YOUNGSTOWN, OHIO, A CORPORATION OF OHIO.

METALLIC LATHING AND CONCRETE-REINFORCING STRUCTURE.

945,656.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed January 13, 1909. Serial No. 472,101.

To all whom it may concern:

Be it known that I, HERBERT E. WHITE, a citizen of the United States, residing on North Heights avenue, Youngstown, county of Mahoning, State of Ohio, have invented a new and useful Improvement in Metallic Lathing and Concrete-Reinforcing Structures.

My invention relates to a metallic structure to be used in building construction, the object being to provide a cheap and substantial product of that character, available for use, either as a self furring lath, or as a reinforcing element in concrete bodies, such as floor slabs and roof slabs.

The objects will more clearly appear in the drawings, and description, which are a part of this specification.

Figure 1 illustrates the article made according to my invention. Fig. 2 illustrates an end view of Fig. 1. Fig. 3 illustrates a rib before being welded on the sheet, as shown in Fig. 1.

In applying metallic lathing to walls, it is customary, first to fasten furring strips to the wall surface at suitable distances, and then fasten the lathing to these strips, thus providing a space between the wall and the lathing, and in the construction of roof slabs and floor slabs of concrete, it is, as is well known, customary to make wooden molds to carry the plastic body until it dries and hardens.

My structure is made with substantial ribs which give it strength and make it rigid. When used as lathing, these ribs also serve the purpose of holding it away from the wall in the same manner as the furring strips; and when used in connection with concrete construction, the stiffness of the article permits its use without wooden molds or centering. It is especially adapted for light floors and roofs. In this kind of construction it is fastened to the iron load sustaining members by wire or suitable clamping devices, and the concrete is then spread on it. My material is rendered practical for such uses by reason of the stiffness which results from the manner in which it is put together. In making it, I avail myself of the use of an electric current to weld the parts solidly together so that the finished article

is as rigid as if the same were made of a single piece of metal. In its production I take strips of metal and bend them preferably in the form of U shaped channels. I lay these on a sheet of metal, preferably of reticulated form. By the use of suitable electrical welding devices which are well known in the electric welding art, the channel pieces and the sheet are welded at a sufficient number of the points of contact as shown by A Figs. 1 and 2, to make the structure rigid. I preferably make the sheet of expanded metal, and the U-shaped ribs of a width approximately one-half of the width of the meshes of the sheet, so that the free edges of the ribs can be welded to the junctions between the expanded bars of the metal sheet. It is obvious that the ribs need not be in the form of channels and that they may be any desired form. It is also obvious that the sheet may also be a perforated sheet of expanded metal or wire work.

Economy of production is also an advantage of the article, since the welding can be cheaply and quickly performed.

What I claim and desire to secure by Letters Patent is:

1. A metallic structure, composed of a reticulated metal sheet and a reinforcing rib secured to one side of said sheet, said rib being of trough form in cross section, and having its two free edges secured to portions of said sheet at points where the members forming said sheet meet or intersect between the openings thereof.

2. A metallic structure comprising a sheet of expanded metal, and a reinforcing rib welded thereto, said rib being of U-shape and of a width equal to approximately one-half the width of the meshes of the sheet, and the welded connections being made between the edges of said U-shaped rib and the junctions of the expanded bars of the sheet, substantially as described.

In witness whereof I have affixed my signature in the presence of two witnesses, this 9 day of January, 1909.

HERBERT E. WHITE.

Witnesses:

F. B. ROOT,  
O. D. KAISER.