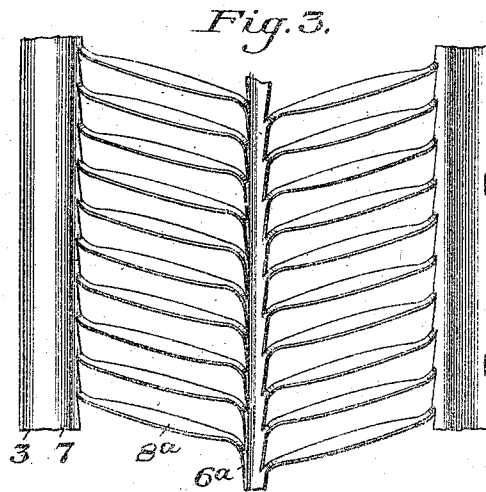
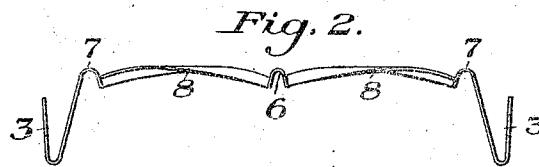
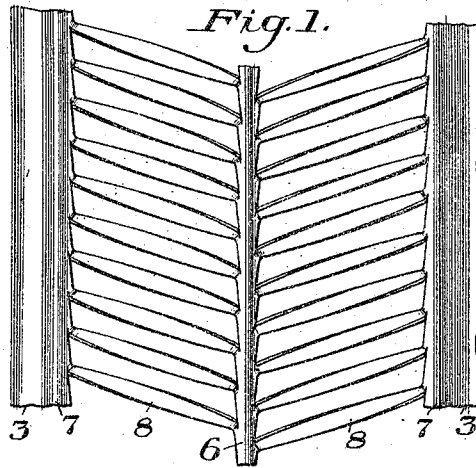


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 SELF FURRING METALLIC LATH.
 APPLICATION FILED FEB. 4, 1910.

1,014,616.

Patented Jan. 9, 1912.

2 SHEETS—SHEET 1.



WITNESSES

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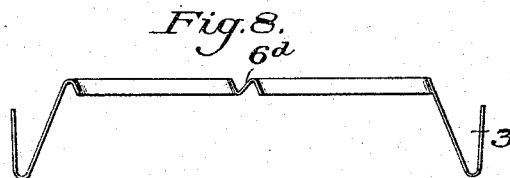
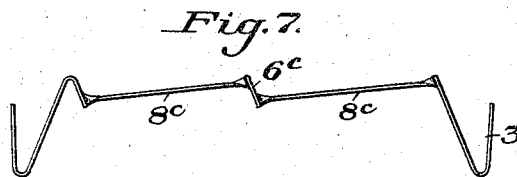
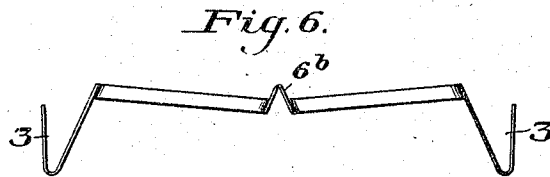
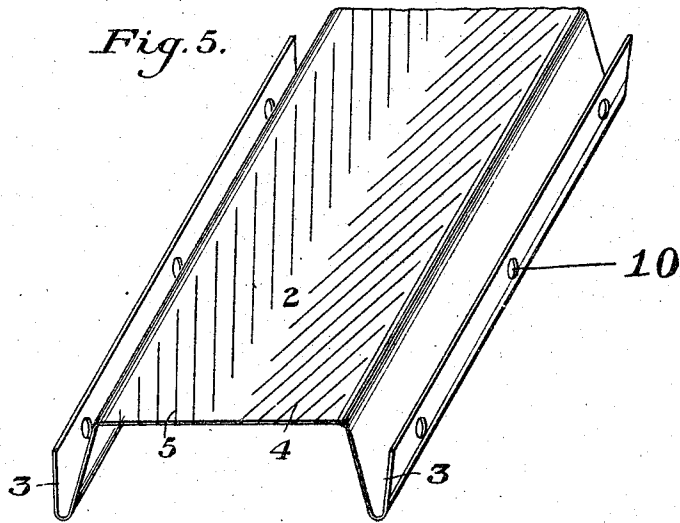


Fig. 9.

WITNESSES

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Walter Tamm

A B C

3 6 8

INVENTOR

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UNITED STATES PATENT OFFICE.

HERBERT E. WHITE, OF YOUNGSTOWN, OHIO, ASSIGNOR TO THE GENERAL FIRE-PROOFING COMPANY, OF YOUNGSTOWN, OHIO, A CORPORATION OF OHIO.

SELF-FURRING METALLIC LATH.

1,014,616.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed February 4, 1910. Serial No. 541,962.

To all whom it may concern:

Be it known that I, HERBERT E. WHITE, of Youngstown, Mahoning county, Ohio, have invented a new and useful Self-Furring Metallic Lath, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a piece of lathing embodying my invention; Fig. 2 is an end view of the same; Figs. 3 and 4 are views similar to Figs. 1 and 2 respectively, but showing a modification; Fig. 5 is a perspective view, showing a portion of the blank from which the lath is constructed; and Figs. 6, 7 and 8 are end views of different forms of laths embodying my invention; Fig. 9 is an end view illustrating a lathing composed of a number of similar units.

My invention has relation to self-furring metallic laths, and more particularly to laths of this character formed of expanded metal; and the object of the invention is to provide lathing of this character which can be readily and cheaply manufactured; which will provide an efficient bonding for the plaster, and which will possess maximum strength and stiffness.

The precise nature of my invention will be best understood by reference to the accompanying drawings, in which I have shown several forms thereof, and which will now be described.

In the manufacture of my improved lathing, I first form a blank such as shown in Fig. 5, consisting of a flat central portion 2 having its edges bent downwardly and then upwardly to form the side ribs 3. This blank is then cut or slitted by two oppositely divided series of cuts 4 and 5, one series of cuts being made along each side of the center of the flat portion of the blank. I next subject the blank to a bending operation (or this may be done simultaneously with the cutting), so as to form the central rib 6 in Figs. 1 and 2, this rib being of U-shape in cross-section and opening rearwardly. I also bend rearwardly the inner edge portions of the side ribs 3 to form lips 7, in the manner clearly shown in Fig. 2. I then open or expand the blank to form the

article shown in Fig. 1, in which the central rib is connected with the side ribs 3 by the oblique slats 8, the two series of slats being oppositely directed. The effect of the bending of the metal to form the central rib 6 and of the downward bends or lips 7, is such that when the blank is expanded, the slats 8 will of necessity be compelled to form a half bend or twist, as clearly shown in Figs. 1 and 2, which greatly stiffens the lathing.

The form shown in Figs. 3 and 4 is the same as that shown in Figs. 1 and 2, except that the central U-shaped rib 6^a, instead of opening backwardly as in Figs. 1 and 2, opens forwardly. With the rib this way, in order to produce the half bends or twists in the ribs or slats 8^a, it is necessary to subject them to a flattening or rolling action.

The modification shown in Fig. 6 is similar to the form shown in Figs. 1 and 2, except that the central rib 6^b instead of being U-shaped is V-shaped. In the form shown in Fig. 7, the central rib 6^c is formed by bending the central portion of the metal obliquely. In the form shown in Fig. 8, the central rib 6^d is of S or Z-form in cross-section. In this form, as well as in the form shown in Fig. 6, the slats do not have the half twists or bends. In the form shown in Fig. 7, the central rib 6^c stands substantially parallel with the inner portions of the side ribs, and this causes the slats 8^c to lie in substantially horizontal planes. It will be obvious that various other changes can be made in the form of the central rib.

The outer portions of the side ribs may be formed with a series of perforations or openings 10 to increase the bonding effect. These perforations can be readily made in the blank during the first operation thereon, which shapes the blank into the form shown in Fig. 5.

For convenience of illustration and description, in Figs. 1 to 7, I have illustrated the manufacture of a single unit of the lathing. In practice, however, I prefer to form relatively wide sheets composed of a plurality of similar connected units. In Fig. 9, I have shown a sheet composed of two of the units A and B and a portion of

a third unit C; and I desire it understood that the structure may be of any practical width and number of units.

My invention provides a metallic lathing which can be manufactured rapidly and at a comparatively low cost; which has a good bending action; which is self-furring, no separate furring strips being applied, and which, although it may be formed of thin metal, possesses a high degree of stiffness and strength.

What I claim is:—

1. As a new article of manufacture, a slitted and expanded sheet metal structure, consisting of slitted and unslitted portions, and having relatively deep ribs consisting of bent unslitted portions of the metal and a shallow rib intermediate of and connected to the deep ribs by oppositely directed slats, at least some of the deep ribs having their edges adjacent to the slitted portions formed with reverse bends facing the opposite side of the structure from the deep ribs themselves, substantially as described.

2. As a new article of manufacture, a slitted and expanded sheet metal structure, consisting of slitted and unslitted portions, and having relatively deep spaced ribs consisting of bent unslitted portions of the metal, and a central shallow rib between each pair of deep ribs and connected thereto by two series of slats, the inner edges of the deep ribs being reversely bent so as to face in the opposite direction from the deep ribs themselves, substantially as described.

3. As a new article of manufacture, a slitted and expanded sheet metal structure, consisting of slitted and unslitted portions, and having deep ribs consisting of bent portions of the metal sheet, said deep ribs being bent to form lips which face in the opposite direction from the deep ribs themselves, and also having shallow ribs intermediate the deep ribs, each shallow rib being connected with the upper inner portions of the adjacent side ribs by means of two series of op-

positely disposed slats formed by the expansion of the slitted portions of the metal sheet; substantially as described.

4. As a new article of manufacture, a slitted and expanded sheet metal structure consisting of slitted and unslitted portions and having deep ribs consisting of bent unslitted portions of the metal, said ribs having relatively narrow reversely bent lips at their edges, and a central shallow rib connected with the deep ribs by series of oppositely directed slats, the outer portions of the deep ribs having perforations therein; substantially as described.

5. As a new article of manufacture, a slitted and expanded sheet metal structure consisting of slitted and unslitted portions and having deep, spaced ribs, consisting of unslitted portions of the metal sheet, and a central shallow rib between each pair of deep ribs connected thereto by two series of oblique slats, the central rib opening rearwardly, and the inner edges of the deep ribs having rearwardly extending lips whereby their edges face in the opposite direction from the ribs themselves, substantially as described.

6. An expanded sheet metal structure, consisting of alternate slitted and unslitted portions, the unslitted portions being bent out of the flat plane of the structure to form ribs, some of said ribs extending from the flat plane of the structure sufficiently to form furring ribs, and the other ribs intermediate the deep ribs being shallow and of substantially the same depth as the thickness of the flat portion of the structure, and at least some of the deep ribs having reverse bends connecting them with the adjacent slitted portions; substantially as described.

In testimony whereof, I have hereunto set my hand.

HERBERT E. WHITE.

Witnesses:

C. Y. FARRELL,
H. R. GLENN.