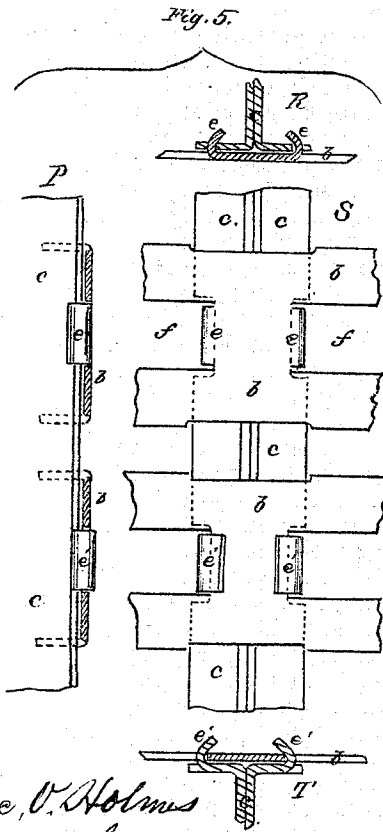
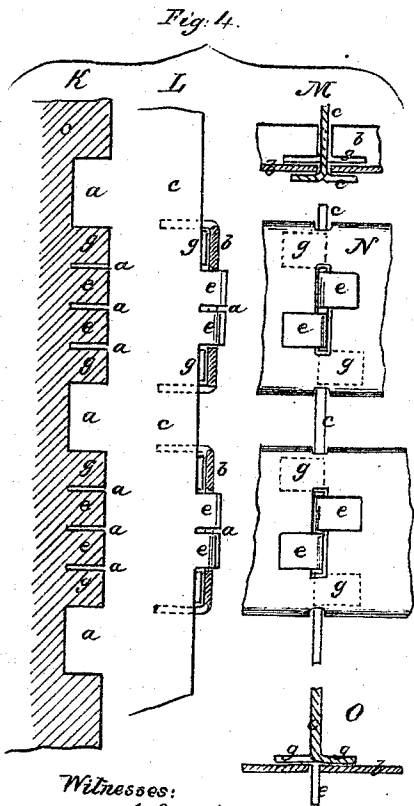
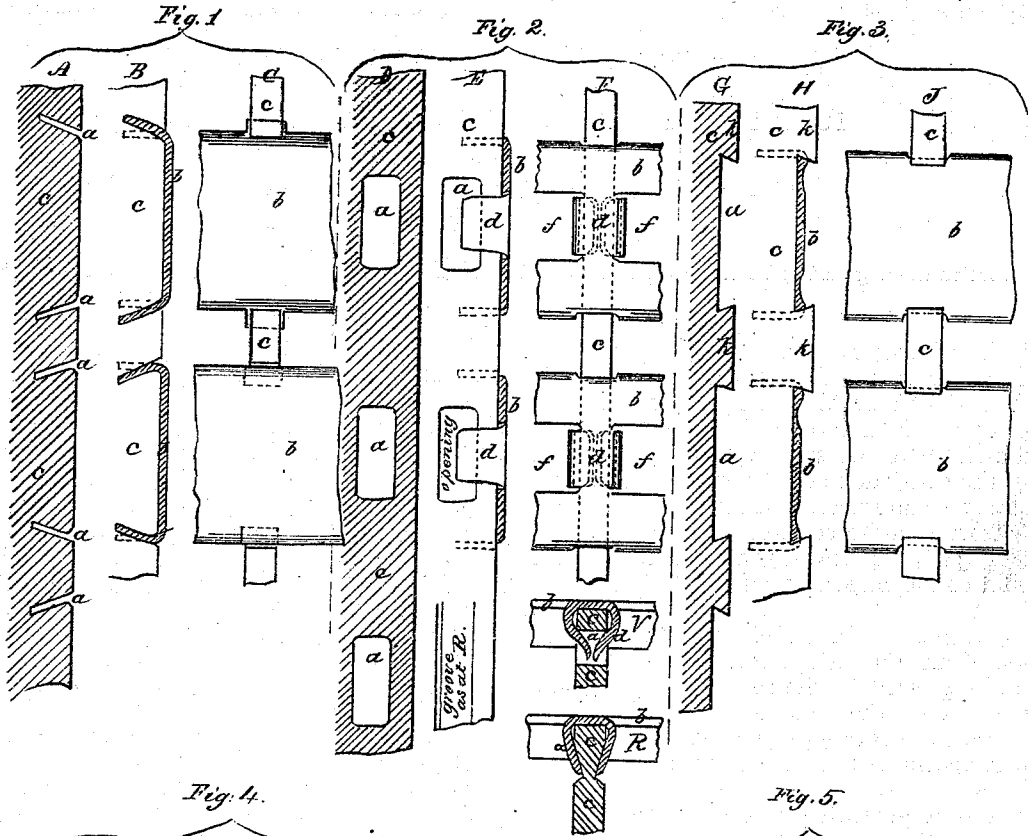


I. V. HOLMES.
No. 122,171.

Mode of fastening Metallic Laths.
Patented Dec. 26, 1871.



Witnesses:

J. D. White
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ISAAC V. HOLMES, OF NEW YORK, N. Y.

IMPROVEMENT IN METALLIC LATHING.

Specification forming part of Letters Patent No. 122,171, dated December 26, 1871; antedated December 9, 1871.

To all whom it may concern:

Be it known that I, ISAAC V. HOLMES, of the city, county, and State of New York, have invented a new and Improved Mode of Fastening Metallic Laths to the supports of the same, as used in the construction of fire-proof walls; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters marked thereon making part of this specification.

The nature of my invention consists in a combination of metallic supports or studs with metallic lathing, used in the construction of walls for houses and other like structures, in such a manner that the lathing can be easily fastened to the supports without bolts, nails, screws, or rivets.

To enable others skilled in the art to make and use my invention, I will proceed to describe the manner in which the fastening is done, reference being had to the accompanying drawing.

The studs or supports, and also the lathing, may be of any suitable material, thickness, width, and of such shapes as will best adapt them to the purpose of supporting the plaster-coat required for the various walls used in buildings, such as the vertical surfaces of partitions and side walls, curved surfaces, such as cornices, moldings, and domes, as well as horizontal surfaces, such as plain or paneled ceilings; and I wish it distinctly understood that I do not confine the application of my mode of fastening lathing to the supports for the same to any particular or special form of either lath or support.

Figure 1: A B C represent a mode of fastening wherein C is the support or stud, through the edges of which are cut or punched a series of slits, marked *a a*, of such suitable depth and width as will receive the edges of the laths. A section of such lath in position, colored red, is shown at B *b*. These slits are cut at an angle with the edge, varying, more or less, from a perpendicular line to such edge, and are also arranged in pairs, each pair of slits inclining either toward or from each other, the two slits composing each pair being used to fasten one lath, such fastening or locking of the lath to the support being accomplished by forcing the two edges of the lath into the two slits, such operation causing the edges of the lath to follow the line of the slits, which has the effect of locking the lath to the support.

Fig. 2: D E F V R represent a mode of fastening wherein C is the stud or support, near the edge of which are punched the openings *a a*, of such suitable distance apart as will agree with the laths required to be fastened. In the place of such openings a groove could be cut parallel with the edge, to serve the same purpose of the openings. The lath being in position, it is fastened by bending a portion, *d d*, of the body of such lath at each side of the support back into the opening or groove, in such a manner as to clasp the support and thereby secure the lath in place.

Fig. 3: G H J represent a mode of fastening where C is the stud or support, the edge of which is cut into recesses *a a* or projections *k k*, the sides of such recesses or projections being inclined to each other, thereby giving a dovetailed recess or projection. The sides of the lath being cut away, the body *b* of the same is placed within the recess or between the projections; then, by means of a suitable tool, the body *b* of the lath is riveted or forced out to completely fill the space, and is thereby fastened securely in position.

Fig. 4: K L M O represent a mode of fastening where thin sheet metal of any suitable form is used for the stud or support C. A part of the edge at *a a*, which comes between the laths, is cut away, and the remainder is, with a suitable tool, divided into two or more parts or tongues, *g g e e*. These divisions are spaced off to suit the lathing required to be supported. Part of these tongues or divisions, marked *g g*, are bent at right angles to the body of the support; the others, marked *e e*, are left standing, as at O. The laths used with this combination are provided with suitable slits cut through the body, of such a length as will correspond with the width of the tongues *e e* on the edge of the supports, and which have not been bent over. In the practical use of this combination, the supports being in position, the laths are placed against the edges so that the tongues *e e* pass through the slits, while the body rests against the tongues *g g*, and then they are fastened or locked to the support by bending or riveting the tongues *e e* down upon the body of the lath.

Fig. 5: P R S T represent a mode of fastening where thin sheet metal is used for the support C, the whole of the edge of such support being bent over at an angle to the body, forming a flange, against which the laths are placed. Through the

body of the laths are punched suitable openings *ff*, at such proper intervals that the material left between such openings will be somewhat less than the flanged edge of the support against which it is to be fastened. The lath being in position against the support, it is securely locked to the same by bending the portions *ee* of the body between the openings in the lath back, over, and behind the flanged edges of the support. If required, portions of the flanged edge of the support may be cut away so that the tongued part of the lath may pass into such spaces, thereby adding to the security. Instead of the above-described mode, the same result may be obtained by bending portions *e'e'* of the flanged edge of the supports, as shown at T, out through the openings *ff* in the lath and forcing the same down upon the body of the lath, thereby securely fastening the two together.

I wish it understood that I do not claim as new or original under this application any of the forms of supports or laths, as shown and described; but—

What I do claim as my invention, and wish to secure by Letters Patent, is—

1. Fastening sheet-metal laths to the supports prepared to receive them by forcing the edges of such laths into slits in the edges of such supports, when such slits are cut at an angle to the edge of such supports, either more or less than at a right angle by the mere grasping force of such supports

upon the laths, and of the laths upon the supports, without the aid of bolts, nails, rivets, or of beating out either laths or supports, substantially as described and shown.

2. Attaching sheet-metal laths to the supports provided for the same, by bending tongues formed from the body of the laths into openings or grooves provided in the supports to receive them, as shown in Fig. 2 of the drawing, and as above described.

3. Fastening metallic lathing to the supports prepared to receive them by beating out portions of the metal forming such laths into recesses, or between projections formed on the surfaces of such supports, as described.

4. Passing the tongues or projections formed on the edges of metallic supports for laths through slits provided in the laths; then riveting or bending these tongues or projections over upon the body of such lath, substantially as set forth.

5. Locking a metallic lath to the support provided for the same by bending portions of the body of such lath back, over the edge of such support, or by bending portions of the edge of such support down upon the body of such lath, as described, and as shown in Fig. 5 of the drawing.

ISAAC V. HOLMES.

Witnesses:

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