(No Model.)

# B. SCARLES.

## METALLIC LATHING.

No. 344,408. Patented June 29, 1886.

Fig. 1.

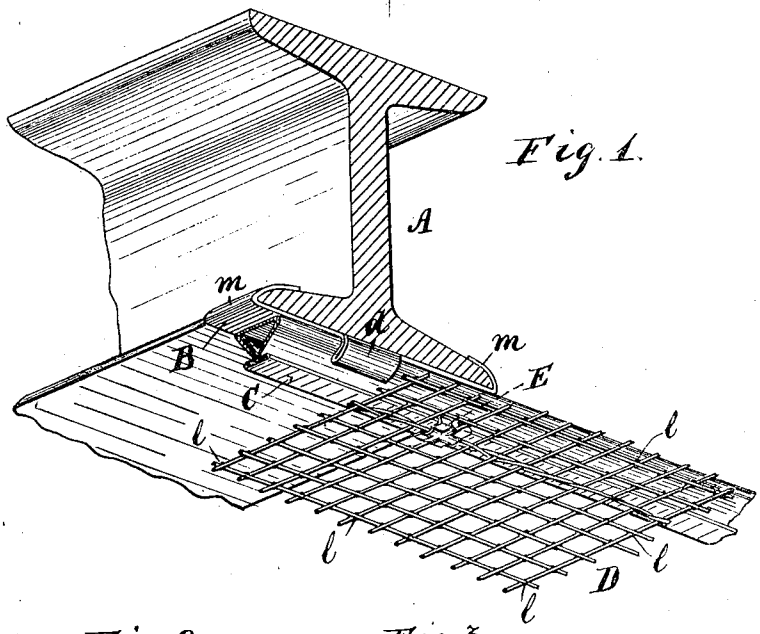



Fig. 2

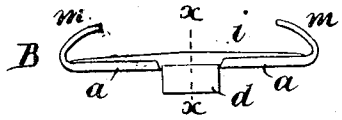



Fig. 3




Fig. 5.

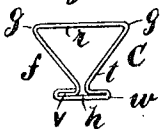



Fig. 6.

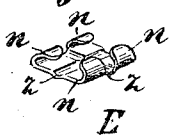



Fig. 4.

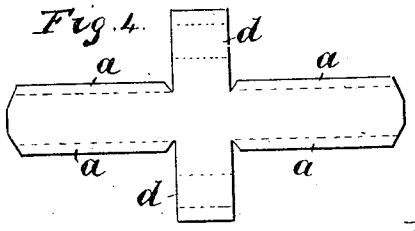



Fig. 9.

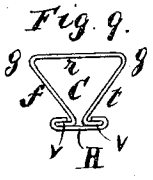



Fig. 7.

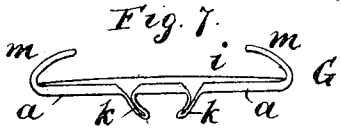
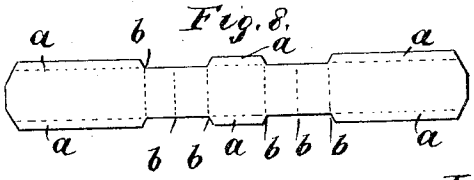



Fig. 8.




Witnesses.

E. Blanton

L. J. White

Inventor

Benjamin Scarles,

Per C. C. Shaw.

Attorney.

# UNITED STATES PATENT OFFICE.

BENJAMIN SCARLES, OF CLINTON, MASSACHUSETTS, ASSIGNOR TO THE CLINTON WIRE CLOTH COMPANY, OF SAME PLACE.

## METALLIC LATHING.

SPECIFICATION forming part of Letters Patent No. 344,408, dated June 29, 1886.

Application filed October 11, 1884. Renewed May 28, 1886. Serial No. 203,565. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN SCARLES, of Clinton, in the county of Worcester, State of Massachusetts, have invented a certain new and useful Improvement in Metallic Lathing, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is an isometrical perspective view showing my improved lathing in position for use; Fig. 2, a side elevation of one of the hangers; Fig. 3, a vertical transverse section taken on the dotted line *x x* in Fig. 2; Fig. 4, a plan view of the blank from which the body of the hanger shown in Fig. 2 is made; Fig. 5, a vertical transverse section of the furring-strip; Fig. 6, a perspective view of the clamp or fastener for attaching the wire-cloth to the furring-strip; Fig. 7, a side elevation showing a modification of the hanger; Fig. 8, a top plan view of the blank from which the body of the hanger shown in Fig. 7 is formed, and Fig. 9 a section showing a modification of the furring-strip.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates more especially to that class of metallic lathing in which wire-cloth is employed for receiving and holding the imposed plastering; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which in some respects a more effective and desirable device of this character is produced than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the beam or girder; B, the hanger for supporting the furring-strip; C, the furring-strip; D, the wire-cloth or lathing proper, and E the clamp or fastener by which the wire-cloth is attached to the furring-strip. The beam or girder A is of the ordinary construction, and requires no description. The body of the hanger B is composed of a strip of sheet metal having its ends bent inwardly to form the flanges *m*, which are adapted to embrace the flanges of the beam. The hanger is strengthened or reënforced by a truss, *i*, consisting of a corrugated or curved strip of sheet metal, which is placed longitudinally along the upper side of its body, and is secured in position by flanges *a* on said body, the flanges being turned inwardly to embrace the edges of the truss, as best seen in Figs. 1 and 3. Projecting laterally from either side of the body of the hanger there is a flange, *d*, which is folded or bent inwardly under said body, and then turned or bent upwardly over itself to form a lug for receiving and holding the furring-strip C, as best shown in Figs. 1, 2, 3, and 4. The furring-strip is also composed of sheet metal, its body being nearly triangular in cross-section, and provided with flanges or projections at the bottom, to which the clamp for securing the wire-cloth to the furring is attached.

In the construction of the furring-strip a sheet of metal cut to the proper length and width is bent longitudinally on parallel lines to form the edges or corners *g*, inwardly-inclined sides *t t*, and plain or flat top *r*. The side *f* has a flange, *v*, turned outwardly on its lower edge, and the side *t*, which is left considerably longer or wider than the side *f* in making the bends at *g*, is bent outwardly to form the flange *w*, and thence carried across the strip in parallelism with the top *r*, and bent upwardly and down upon the flange *v*, as best seen in Fig. 5, thus forming the bottom *h* and a double or T-shaped flange at the lower side of the strip.

The wire-cloth D is of the ordinary texture and quality usually employed for this purpose, but has its warp and filling wires galvanized together at the points of intersection, *l*, or where they cross and recross each other, the object being to keep them from becoming displaced, more especially at or near the edges of the cloth, in putting up the lathing, and also to render the cloth firmer and better adapted to properly hold the plastering.

The galvanizing of the wires together may

be accomplished by any of the ordinary processes employed for galvanizing wire, a sufficiently heavy coating being applied to firmly unite them, and also to protect the wires from oxidization.

The clamp E is composed of sheet metal, and is provided with flanges *n*, which are passed through the meshes of the cloth and caused to grasp the flange of the furring-strip C by being bent down onto either side of the same by any suitable implement for that purpose. The body of the clamp is indented or grooved both longitudinally and laterally, as shown at *z* in Fig. 6, the grooves being designed to respectively receive a warp and filling wire of the cloth, and thus enable the clamp to be brought into closer connection with the furring-strip, to prevent it from showing through the plastering. The clamp is also galvanized, and may be made larger, if desired, the number of flanges *n* and grooves *z* being increased in number in accordance with its size.

The hanger shown in Fig. 2 is designed for use where the furring-strip runs at right angles to the beam; but when the strip is run in the same direction of the beam, as occasionally required, the hanger is constructed as seen at G in Fig. 7. This hanger is also formed of sheet metal, its body being made from the blank shown in Fig. 8, which is bent transversely on the dotted lines *b*, to form the inclined lugs *k* for receiving and holding the furring-strip C. The body of the hanger G is strengthened or re-enforced by a corrugated or curved truss, *i*, which is secured in position by flanges *a* on said body in substantially the same manner as the truss shown in Fig. 2 is secured to the body of the hanger B.

Both of the hangers B G are galvanized, thereby protecting them from moisture, and also more firmly securing the trusses in position. The galvanizing also firmly unites the parts of the lugs *d k*, and thereby greatly strengthens them. I do not, however, confine myself to galvanizing either the furring, hanger, clamp, or wire-cloth, although I deem it preferable to do so; neither do I confine myself to forming the furring C of a single sheet of metal with all of its parts integral, as the side *t* may be cut of the same length as the side *f*, and have a flange turned on its lower edge corresponding with the flange *v*, and the clamp E be attached to or suspended by these flanges, if desired.

When the sides *t f* of the strip C are so made as to be equal in width, and each provided with a laterally-projecting flange, *v*, as described, said sides may be united at the bottom by a sheath or binding-plate, H, as shown in Fig. 9, if desired, thereby accomplishing substantially the same result which is attained by bending the side *t* and interlocking it with the flange *v* of the side *f*, as shown in Fig. 5.

In manufacturing the hangers B G for the market or to keep in stock one or both of the end flanges, *m*, and lugs *d k* may be left unformed until the hangers are required for use, if desired.

By constructing the strip C with a bottom, *h*, or sheath, H, the moisture is prevented from readily entering the body of the strip, rendering it more durable, and also much stronger.

Having thus explained my invention, what I claim is—

1. As a new article of manufacture, a sheet-metal hanger for metallic lathing, said hanger being provided with a sheet-metal truss running longitudinally of its body, downwardly-turned flanges or lugs at or near its center, adapted to embrace and support the furring-strip, and one or more upwardly-turned ends or flanges adapted to embrace the beam, substantially as set forth.

2. As a new article of manufacture, a sheet-metal furring-strip for metallic lathing, said strip having a body nearly triangular in cross-section and provided with a supporting flange or flanges at or near the bottom, adapted to engage a clamp for the wire-cloth, substantially as described.

3. The furring-strip C, having the inwardly-inclined sides *t f*, the side *f* being provided with a flange, *v*, and the side *t* bent to form the flange *w*, and thence carried across the strip and bent around or folded down upon the flange *v*, thereby connecting the flanges and forming a bottom, *h*, to the strip, substantially as set forth.

4. As a new article of manufacture, a sheet-metal furring-strip for metallic lathing having a top of greater width than its body, to enable it to engage the hanger properly, sides standing at an angle to the top, and a flange or flanges at the bottom adapted to engage a clamp for attaching wire-cloth to the furring, the top, sides, and flange or flanges of said strip being integral or made of one piece, substantially as described.

5. As a new article of manufacture, a sheet-metal furring-strip for metallic lathing, said strip having a top, sides, bottom, and a flange or flanges at the bottom adapted to engage a clamp for attaching wire-cloth to the strip, substantially as set forth.

6. As a new article of manufacture, a sheet-metal furring-strip having a top, sides, bottom, and a flange or flanges at the bottom adapted to engage a clamp for attaching wire-cloth to the strip, the top, sides, bottom, and flange or flanges being integral or composed of one piece, substantially as described.

7. As a new article of manufacture, a sheet-metal clamp for attaching the wire-cloth to the furring-strip in metallic lathing, said clamp having a groove or grooves for receiving a wire or wires of the cloth, and being provided with flanges adapted to engage the furring-strip, substantially as described.

8. The clamp E, provided with the grooves *z* and flanges *n*, substantially as set forth.

9. The hanger B, provided with the lugs *d*,

flanges *m*, and truss *i*, constructed and arranged to operate substantially as set forth.

10. The improved metallic lathing herein described, the same consisting of the beam A, hanger B, furring-strip C, wire-cloth D, and clamp E, constructed, combined, and arranged to operate substantially as described.

11. In a metallic lathing, the clamp E, in combination with the cloth D, a furring-strip, and means for attaching the strip to a beam, substantially as set forth.

BENJAMIN SCARLES.

Witnesses:
C. A. SHAW,
L. J. WHITE.