

No. 704,072.

Patented July 8, 1902.

F. A. MITCHELL.
METALLIC LATHING.

(Application filed Sept. 25, 1901.)

(No Model.)

Fig. 1.

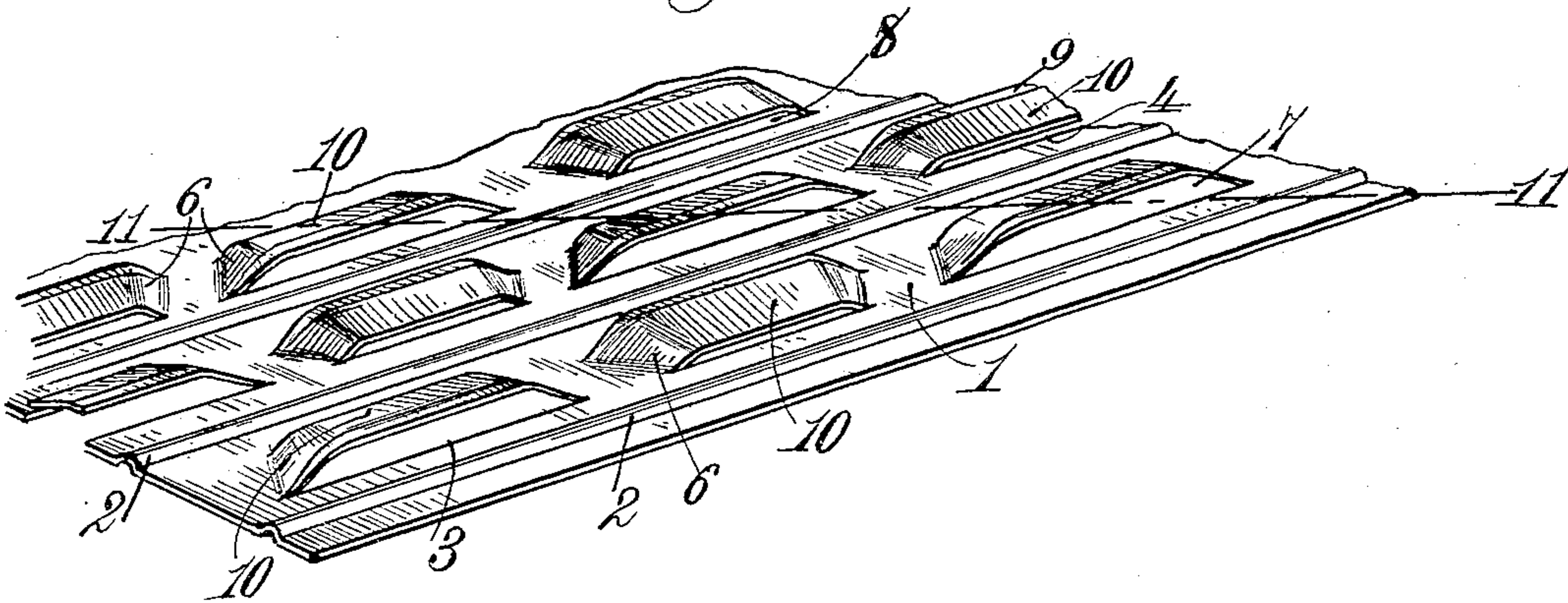
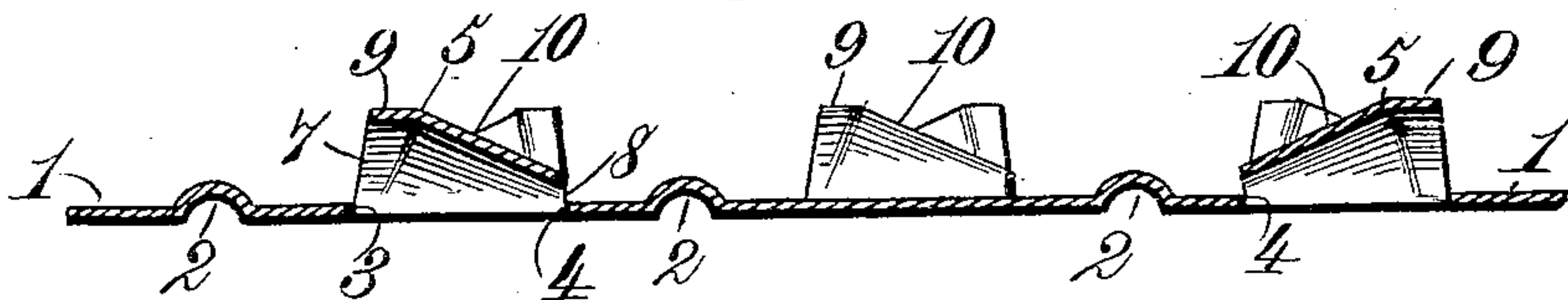


Fig. 2.



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UNITED STATES PATENT OFFICE.

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METALLIC LATHING.

SPECIFICATION forming part of Letters Patent No. 704,072, dated July 8, 1902.

Application filed September 25, 1901. Serial No. 76,477. (No model.)

To all whom it may concern:

Be it known that I, FERRIS A. MITCHELL, a citizen of the United States, residing at New York city, in the county and State of New York, have invented new and useful Improvements in Metallic Lathing, of which the following is a specification.

This invention relates to metallic lathing, and has for its object to provide a sheet-metal lath that will operate to firmly and effectually anchor or tie the plaster, that will automatically aid in directing or crowding the plaster in the sockets or keepers, and over which the plasterer's trowel or finishing-tool will smoothly glide or travel.

To these ends the invention consists in the features and in the novel construction and arrangement hereinafter described, and particularly pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a perspective view of a portion of the improved lathing, and Fig. 2 is a transverse sectional view thereof.

Referring to the drawings, numeral 1 indicates the body of the improved sheet-metal lath, which may be of any suitable or preferred length and width and which is preferably corrugated or ribbed at 2. Said ribs operate to give added strength and stiffness or rigidity to the lath and also serve to prevent the plaster from "creeping" or sliding laterally on the metallic surface of the lath. As shown, said ribs are formed parallel with one another. Such ribs are well known in the art and are not absolutely essential and may be therefore omitted or dispensed with.

In making the laths longitudinal slits or incisions 3 and 4 are cut or formed between each pair or two adjacent ribs, said slits being made in pairs, each pair of slits comprising two straight parallel cuts of unequal length. The metal between each pair of slits is then pressed or stamped up by means of dies or other suitable means and at the same time is extended lengthwise or elongated, the die or shaping-tool being of such configuration that the metal between the slits will be inclined or lie at an angle relatively to the body or plane of the lath, the inclination starting at a point above the slits 4 and ex-

tending in an upward direction toward a point 5 above the slits 3, the slits 4 being the shorter slits. From the points 5 to the edges of the metal the latter lies in a plane parallel with the plane of the body of the lath. The metal between the ends of each pair of slits is bent at an angle to the plane of the body of the lath, as at 6, and in planes which converge toward a transverse line passing centrally through the struck-up portion of the metal. This results in the formation of keepers or sockets, each having an approximate wedge shape and an enlarged opening 7 on one side and a contracted opening 8 on the other. That portion 9 of each keeper bounding the large opening 8 is parallel with the body of the lath, while the remainder is inclined to said plane, as at 10.

As shown most clearly in Fig. 1 of the drawings, the keepers of each row or series alternate with one another—that is to say, they are so arranged that the large opening 7 of one keeper in any particular row or series is disposed in an opposite direction to the corresponding openings of the two adjacent keepers, and the keepers of the several rows are so arranged that the keeper of any one row will lie opposite the space between two keepers of an adjacent row. In other words, the keepers of one row "break joints" with the keepers of the two adjacent rows, whereby a line drawn at an angle of forty-five degrees through any one of the keepers will pass diagonally and centrally through a number of keepers, as indicated by the dotted line 11. Fig. 1, all the keepers included in such series being alike—that is to say, all of such keepers are inclined in the same direction, with their larger openings also facing the same way, and, conversely, in the next adjacent diagonal series or row of keepers the keepers will be inclined in the opposite direction. It therefore follows that when the laths are secured in place one-half of the diagonal series of keepers will have their large openings disposed uppermost and the alternate diagonal series will have their small or contracted openings disposed uppermost.

In applying the plaster to the lathing the plasterer spreads the plaster thereon by alternate upward and downward sweeps of the trowel, and in the upward stroke of his hand

he sweeps the plaster over a diagonal row of keepers having their large openings disposed downwardly, and in the downward stroke he sweeps the plaster over a row of keepers having their larger ends disposed uppermost. It follows, therefore, that as the plaster is spread over the lathing it is constantly being swept into the pockets formed by the keepers from the larger end. The keepers thus act as hoppers, and as the plaster is swept, pressed, or crowded into or beneath the keepers a portion is forced out through the contracted ends of the keepers and acts as an anchor to tie or bind the plaster to the lath. Owing to the flat edge portions 9 of the keepers a series of smooth surfaces, all lying in the same plane, is provided, over which the trowel easily and smoothly glides without encountering any rough, uneven, angular, or sharp edges, and as the plaster is pressed against the laths by the trowel the inclined portion 10 of one keeper operates to direct the plaster into the large or flaring opening 7 of the next keeper.

By means of the improved lathing described the plaster is firmly and securely anchored or tied in place. Furthermore, by arranging the keepers in the manner described they are successively presented to the action of the trowel as the latter is swept by natural motions of the arm of the plasterer in alternately upward and downward diagonal directions. Again, owing to the straight-edge portions 9 of the keepers no angular, rough, or sharp edges offer themselves to the free sweeping movements of the trowel or finishing-tool.

Having described my invention, what I claim is—

1. A lath consisting of a metallic plate having a plurality of keepers stamped up therefrom so that the opposite edges thereof will lie above the plane of the body of the plate and substantially parallel therewith throughout their length, and each keeper having a flaring and a contracted opening respectively formed on its opposite sides, substantially as described.

2. A lath consisting of a metallic plate hav-

ing a plurality of open keepers stamped up therefrom so that the opposite edges thereof will lie above the face of the plate and in different planes, the arrangement being such that the openings on the opposite sides of the keepers will differ in depth throughout substantially their entire length, substantially as described.

3. A lath consisting of a metallic plate having a plurality of keepers stamped up therefrom, each keeper having a flaring and a contracted opening respectively formed on its opposite sides, the highest portion of said keeper being flat and straight and disposed parallel to the plane of the body of the lath, and thence inclined toward the said contracted opening, substantially as described.

4. A lath consisting of a metallic plate having a plurality of rows of parallel slits arranged in pairs, the slits of each pair being of unequal length and the metal between each pair of slits being stamped up to form an open keeper, the arrangement being such that each keeper has a flaring and a contracted opening respectively formed on its opposite sides said openings differing both as to length and width.

5. A lath consisting of a metallic plate having a plurality of keepers stamped therefrom and open on opposite sides, each of said keepers being inclined for a portion of its width and said inclined portion terminating in a flat edge wall that lies parallel with the plane of the plate.

6. A lath consisting of a metallic plate having a plurality of rows of keepers stamped therefrom and open on opposite sides, the keepers of each row being alternately inclined in opposite directions relatively to the plane of the body of the lath.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FERRIS A. MITCHELL.

Witnesses:

S. E. GARDNER,
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