No. 681,355

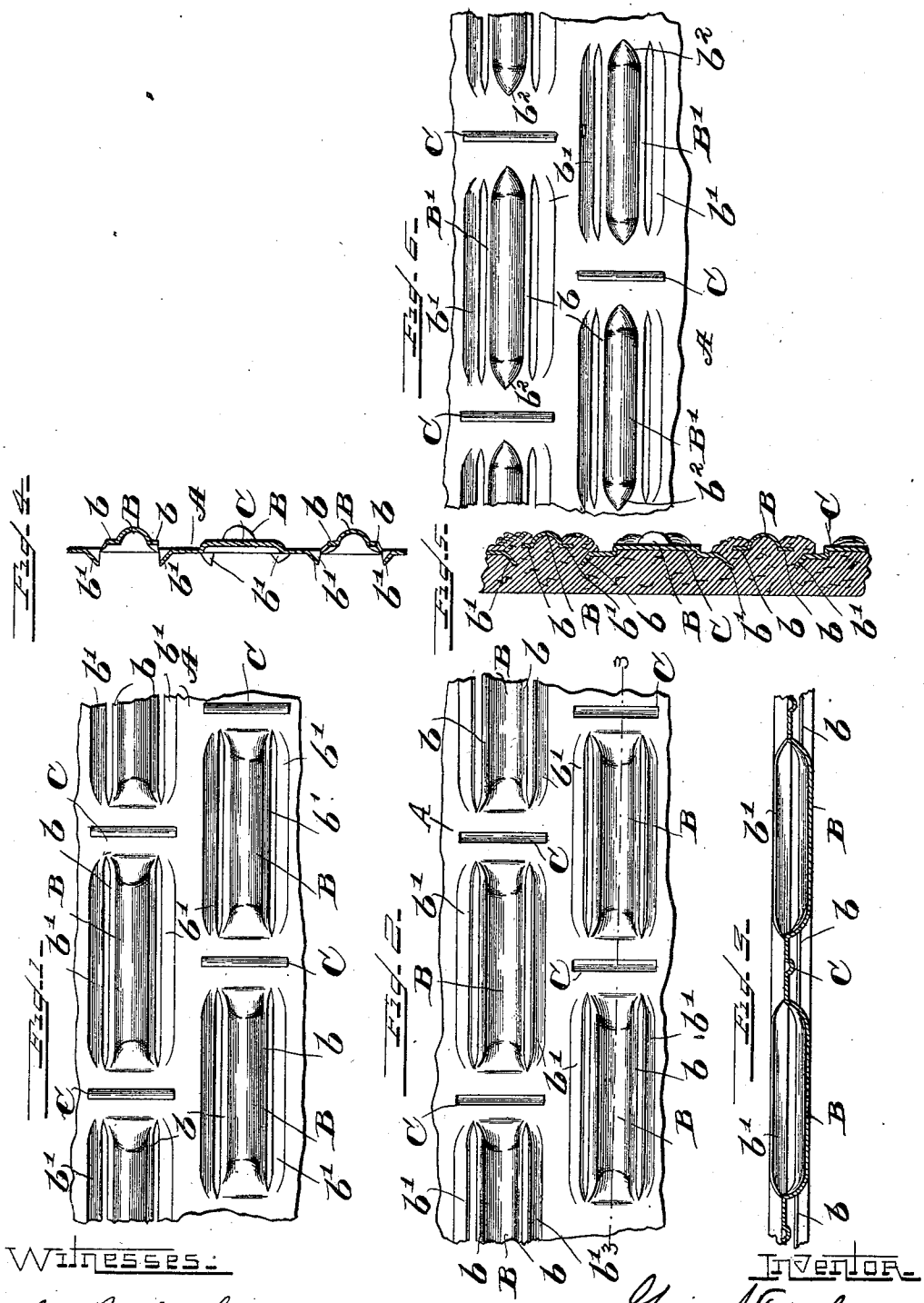
Patented Aug. 27, 1901.

G. A. TURNBULL.

METALLIC LATH.

(Application filed Dec. 26, 1900.)

(No Model.)



Witnesses:

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METALLIC LATH.

SPECIFICATION forming part of Letters Patent No. 681,355, dated August 27, 1901.

Application filed December 26, 1900. Serial No. 41,064. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. TURNBULL, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metallic Laths; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in metallic laths, and more particularly to sheet-metal laths, and has for its object a construction of great strength as compared with the weight of the material used and one that can readily be formed by rolling. Heretofore in inventions of this class a larger proportion of mortar than necessary has been wasted in forming the clench. Furthermore, sharp or knife edges have been interposed to support the clench and large flat surfaces have been employed, with the result that the plaster when placed on such lath is likely to be loosened by the vibrations of a building and fall away from the lath. These defects I have obviated in my invention, as will hereinafter more fully appear.

The invention consists in the matters hereinafter described, and more fully pointed out and defined in the appended claims.

As shown in the drawings, Figure 1 is a fragmentary bottom plan view of a sheet-lath constructed in accordance with my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a section taken on line 3 3 of Fig. 2. Fig. 4 is a transverse section showing three of the keys. Fig. 5 is a sectional view similar to Fig. 4 and illustrates the manner of forming and supporting the clench when plastered. Fig. 6 is a modified form of my invention.

In carrying out my invention a sheet of metal A is provided with a plurality of parallel longitudinal slits arranged in pairs, said pairs being arranged staggering with each other. The material of the sheet between each pair of slits is forced outwardly beyond the plane of the sheet, forming a key B. Said keys are approximately straight in a longitudinal median line and are inclined upwardly at the ends and united integrally with the sheet and, as shown, are cylindrically concave in cross-section. On each side of each of said keys and integral therewith is provided a longitudinal integral flange *b b*, approximately parallel with the plane of the sheet and extending outwardly from the key. The edges of the sheet on each side of the slits adjacent to said keys are bent oppositely therefrom and form longitudinal outwardly-directed converging flanges *b' b'*, more plainly indicated in Figs. 4 and 5. In forming said keys B and said flanges *b'* the slits are dilated laterally sufficiently to permit a desired amount of plaster or mortar to be forced therethrough to form the clench. As shown, in the finished form of the sheet said slits are relatively narrow and the sides thereof converge to a point at either end thereof. For the purpose of more effectually securing the plaster on said lath a supplemental clenching surface or key C is formed transversely of the sheet and between adjacent keys. Said supplemental key C, as shown, is cylindrically concave and serves to greatly increase the adhesion of the plaster to the lath and materially increases without decreasing the strength of the lath.

The form illustrated in Fig. 6 is similar to that illustrated in the preceding figures, with the exception that the ends of each of the keys B' are pointed and incline upwardly to the plane of the sheet, with the effect of greatly strengthening said keys and acting to prevent them being flattened or distorted by any ordinary pressure.

The operation of my device is as follows: The lath is applied to the studding or other prepared wall or surface with the back or convex surface of the keys adjacent thereto, as indicated in Fig. 5, and may be used without wall-furring, as preferred, as obviously said keys may serve as furring. Plastering material of suitable consistency is then applied in the usual manner over the front of the lath, with the effect that a portion of said plastering material is forced inwardly between the converging flanges *b'* and through the slit on each side of the keys until a portion thereof rests on the back side of the sheet and rear sides of the keys B and the flanges *b*, as indicated in Fig. 5. Said material, owing to its plasticity, is forced thoroughly into the concavity of the keys B and C, entirely filling the same, whereby the adhesive sur-

face of the sheet is enormously increased. It is to be observed that owing to the peculiar conformation of the keys and the flanges thereon and adjacent thereto the plaster or mortar forms a triple or compound clench, of which the part inclosed between the converging flanges *b' b'* constitutes the main clench. The supplemental clenches are located on each side of the key and supported on the flange *b* and the rear side of the plate or sheet and are integrally connected with said main clench. It is obvious that when said sheet-lathing is used without furring other than the backs of the keys B ample space remains back of the sheet and the flanges *b* to permit the clenches to form, as shown. Furthermore, the cylindric form of said keys affords a maximum of strength with a minimum of weight.

Obviously many details of construction may be varied without departing from the principle of my invention.

I claim as my invention—

1. A self-furring metallic lath comprising in combination, a slitted sheet, flanges on the rear side thereof approximately parallel with and out of the plane of the sheet from which said lath is formed and converging flanges on the opposite side of the sheet.

2. A self-furring metal lath comprising in combination, a slitted sheet, a plurality of approximately parallel keys having their outer surfaces cylindrically curved and projecting beyond the plane of the sheet, a flange extending laterally from each key and out of the plane of and approximately parallel with the rear surface of the sheet and adapted to afford together with the rear surface of the sheet a holding-surface for the clench, and a supplemental key intermediate of said keys.

3. A self-furring metal lath comprising a slitted sheet, a plurality of keys projecting between the slits on one side of the sheet and beyond the plane thereof, said keys being straight longitudinally and curved transversely, a flange extending laterally on each side of each key and approximately parallel with the sheet, converging flanges on the opposite side of the sheet and a supplemental key intermediate of the first-named keys.

4. As an article of manufacture, a metallic lath comprising a sheet of metal provided with a plurality of pairs of parallel longitudinal slits, the metal between the slits of each pair being forced outwardly beyond the plane of the sheet and forming longitudinally-straight keys which are cylindrically convex laterally, an approximately flat flange on each edge of each key and approximately parallel with the sheet and out of the plane thereof and flanges on the sheet on each side of each key which converge in front of the same.

5. As an article of manufacture, a sheet-metal lath provided with a plurality of pairs of parallel slits, said pairs being arranged staggering and approximately parallel with each other, the metal between each pair of slits being forced outwardly beyond the plane of the sheet forming a longitudinally-straight but transversely-concave key, integral flanges on each side of each key approximately parallel with the sheet and out of the plane thereof and flanges on the sheet adjacent to each key directed obliquely from the key and converging on the front side of the sheet together with flanges on the key adapted to form a triple or compound clench when plastering material is applied thereto.

6. As an article of manufacture, a sheet-metal lath provided with a plurality of pairs of parallel slits, the metal between each pair of slits being forced outwardly beyond the plane of the sheet forming a transversely-concave key having pointed ends, integral flanges on each side of each key approximately parallel with the sheet, flanges on the sheet adjacent to each key directed obliquely from the key and converging on the opposite side therefrom and together with the flanges on the key forming a triple or compound clench after the plastering material is applied thereto.

7. As an article of manufacture, a sheet-metal lath provided with a plurality of pairs of parallel slits, the metal between each pair of slits being forced outwardly beyond the plane of the sheet forming a key which is cylindrically concave transversely, flanges on each side of each key approximately parallel with the sheet, converging flanges on the opposite side of the sheet adjacent to each key, said slits being dilated intermediate of the ends and supplemental cylindrically-concave keys formed between the ends of adjacent keys.

In witness whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

GEORGE A. TURNBULL.

In presence of—
CHARLES W. HILLS,
L. J. DELSON.