(No Model.)

G. HAYES.

METALLIC LATHING.

No. 537,976. Patented Apr. 23, 1895.

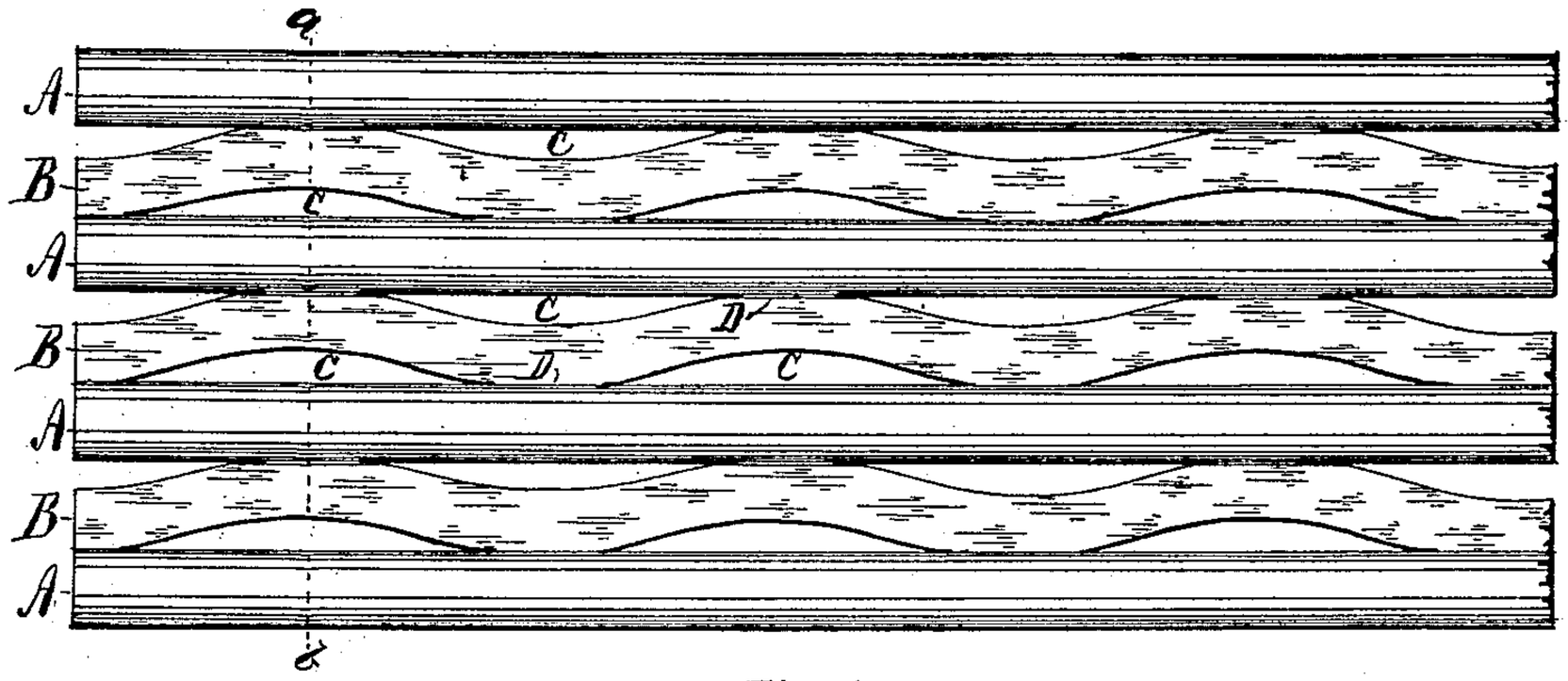

Fig. 1.

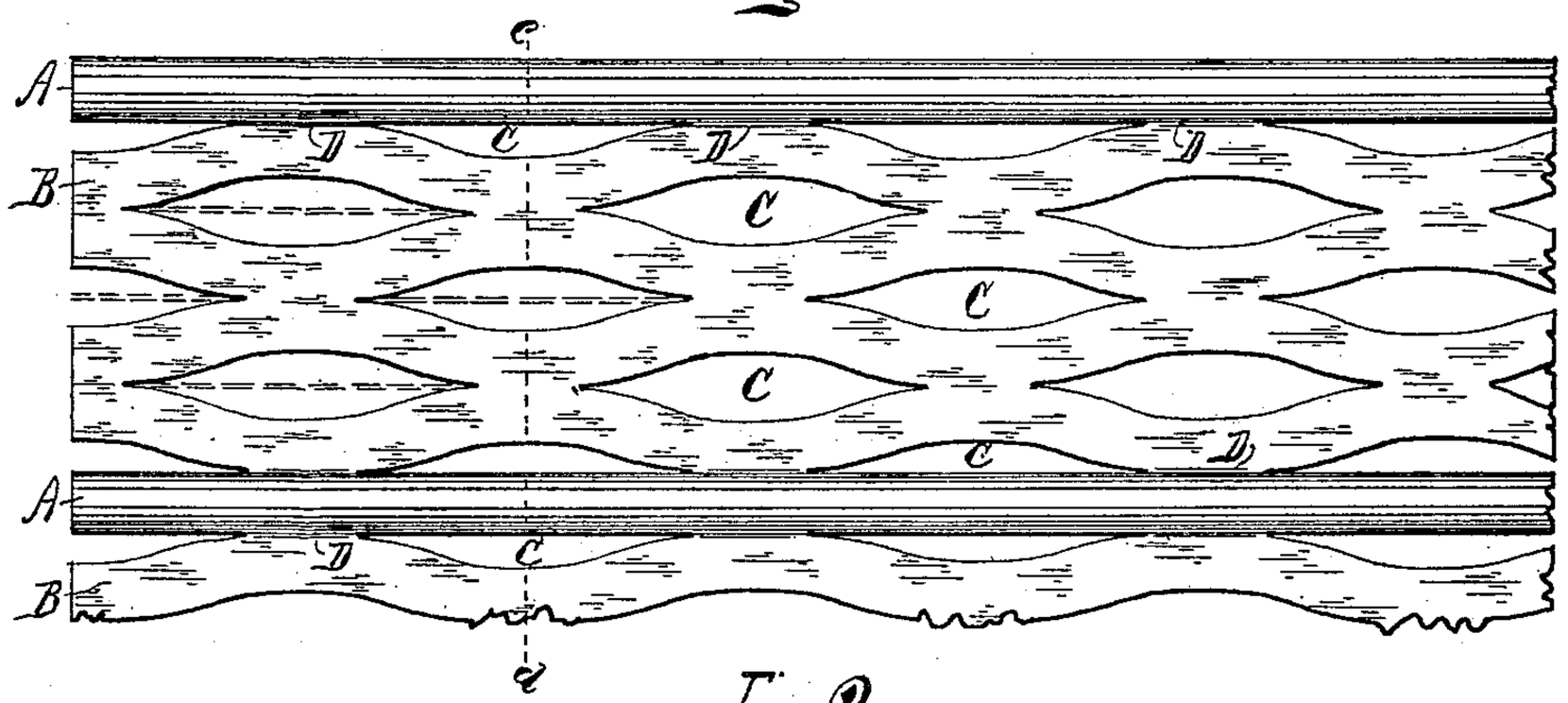

Fig. 2.

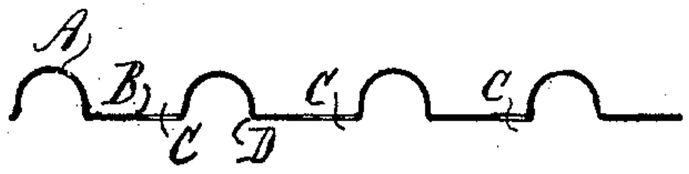

Fig. 3. a-b

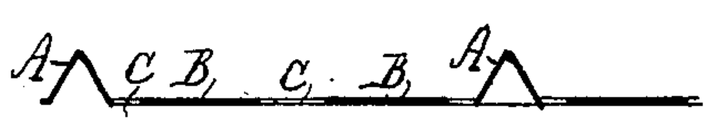

Fig. 4.

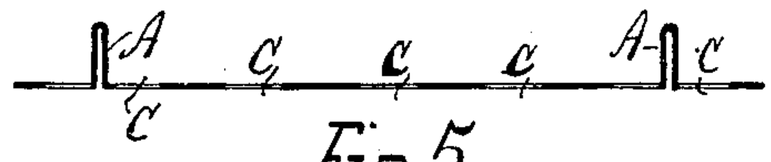

Fig. 5.

Witnesses:
Arthur Hayes.
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UNITED STATES PATENT OFFICE.

GEORGE HAYES, OF NEW YORK, N. Y.

METALLIC LATHING.

SPECIFICATION forming part of Letters Patent No. 537,976, dated April 23, 1895.

Application filed January 20, 1894. Serial No. 497,498. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HAYES, a citizen of the United States, and a resident of the city, county, and State of New York, have invented a new and useful Metallic Lathing, of which the following is a specification.

My invention consists of a lathing of sheet-metal, corrugated, ridged, or ribbed at intervals with flat surfaces between, the flat spaces slitted at intervals in longitudinal lines, alternately breaking joint—and the corrugations, ridges, or ribs allowed for by lateral expansion of the openings in the flat spaces—whereby the finished lathing sheet remains of the same area, or substantially the same area and outline as that of the original flat sheet blank from which it was made, all as hereinafter more fully described and pointed out in the claim, reference being had to the accompanying drawings, in which—

Figure 1 is a face view of a piece of the new lathing sheet with flat spaces and ribs shown, the slitted openings in the flat spaces expanded and sheet finished. Fig. 2 is also a face view like Fig. 1, except that more rows of slitted openings are made in the flat spaces. Fig. 3 is a cross section on line *a*—*b*, of Fig. 1. Fig. 4 is a cross section illustrating a modification in respect to shape of ribs. Fig. 5 is also a cross section showing a modification in respect to ribs.

On the drawings, A, indicates the corrugations, ridges, or ribs, formed in the sheet metal, located at intervals apart and of any desired shape to give the sheet rigidity.

B, indicates the web of metal between the ridges or ribs, constituting the flat portions of the sheet, and C, indicates the openings formed in the flat spaces by slitting, or otherwise cutting through the sheet at intervals in longitudinal lines, parallel with the ribs A, but arranged so that the openings of alternating, or intervening lines break joint with those of adjacent lines.

In making a sheet of this lathing the metal is first slitted, or otherwise cut through in the desired places, where destined to form flat surfaces leaving the parts destined for ribs, ridges or corrugations uncut and blank, and then by means of suitably formed dies, male and female, pressing out of plane the portions desired for projections as ridges, ribs or corrugations, the dies being so formed that they will not bind upon the slitted, or cut through portions thereby leaving the metal web B, free to move laterally as the slits, or cuts expand, they being drawn apart, or stretched open, as the ribs, or ridges, are forced out of plane—and the sum of the expansion thus gained compensates for the amount of metal taken out, or projected beyond the plane as ridges, ribs, or corrugations. As the dies bind upon the ridged portions no lateral movement can take place at such points—and the width of the sheet operated upon remains, when finished as a lathing sheet, of the same breadth as when in its previous condition as an uncut blank, and no loss of surface is incurred through the formation of projections.

The sheet of Fig. 1, shows two rows of slitted openings. This is the preferable form, but three, or even five lines of slits will secure good results, and the compensation for the projected portions be substantially the same.

The expanded openings afford good bond for plaster and a rigid and economical lathing sheet is produced.

The ridges being uncut and solid their entire strength is preserved and they become in effect bars.

This lathing may also be made by a method somewhat different from that hereinbefore described—to wit, by rendering it fixed at the ribs, ridges, or corrugations and pressing out of plane the intervening slitted web of metal, leaving it sufficient freedom of movement as the slits, or cuts, expand. In either way the result is the same.

The operation may be performed by hand tools, reciprocating dies in an organized machine, or by rolls having surfaces formed as annular ridges and hollows.

What I claim as new, and desire to secure by Letters Patent, is—

A lathing of sheet-metal formed with projecting ridges, ribs, or corrugations arranged at intervals apart, the intervening portions of the sheet remaining flat, the projecting portions of the sheet uncut and without apertures, the flat portions slitted, or otherwise cut through at intervals and expanded, the ribs, ridges, or corrugations allowed for by the lateral expansion of the openings in the flat spaces as set forth.

GEO. HAYES.

Witnesses:
GEO. A. HAYES,
FRANK HALLE.