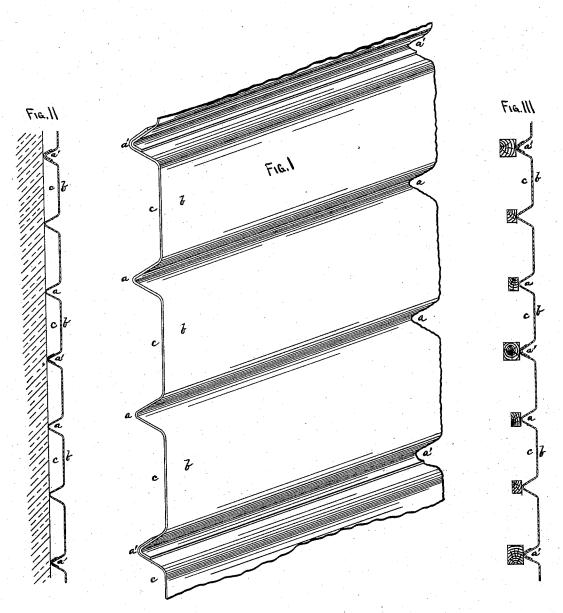
## M. H. CRITTENDEN. Metallic Sidings for Buildings.

No. 209,329.

Patented Oct. 29, 1878.



Mason H. Crittenden,

WITNESSES.

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attys.

## UNITED STATES PATENT OFFICE.

MASON H. CRITTENDEN, OF ST. PAUL, MINNESOTA, ASSIGNOR OF ONE-HALF HIS RIGHT TO EDWARD E. SCRIBNER, OF SAME PLACE.

## IMPROVEMENT IN METALLIC SIDINGS FOR BUILDINGS.

Specification forming part of Letters Patent No. **209,329**, dated October 29, 1878; application filed March 18, 1878.

To\_all whom it may concern:

Be it known that I, MASON H. CRITTENDEN, of St. Paul, in the county of Ramsey and State of Minnesota, have made certain new and useful Improvements in Metal Sidings for Buildings, &c., which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of one end of a sheet of metal pressed into the form in which I intend to use them; Figs. 2 and 3, sectional views, showing the method of applying the siding.

My invention relates to sheet-metal sidings for buildings.

It has for its objects to produce a siding which shall be free from the usual buckling which occurs under the influence of atmospheric changes, and which shall at the same time be readily and securely fastened in position so as to effectually exclude all moisture and successfully "shed" the rain.

Previous to my invention, it has been customary, in forming panels from sheet metal, to simply treat the ends or edges of the sheet to form laps or joints, the surface between such edges forming a single panel, either plane or angular, but without any support intermediate of the edges, the only exception being the ordinary continuously-corrugated metal, which in nowise presents a panel appearance.

My invention consists in forming two or more flat-faced panels from a single sheet by crimping the metal in V-shape form at suitable points between the edges or ends of the sheet, and in also forming V-shaped laps at the extremities of the sheet, so that when a series of formed sheets are laid upon a building the joints will form grooves similar to those between the panels of each sheet, and so that said joints and grooves will, by reason

of the obliqueness of their sides, successfully shed or turn the rain.

To form my improved siding, I take ordinary sheets of metal, preferably iron, and press them, by machinery, into the form shown at Fig. 1 with the channels or grooves a, in a number of places between the edges, which are formed with lap-grooves a', similar to a. This leaves the raised panels b b on each sheet, and when placed upon the building, as shown at Figs. 2 and 3, with the edges lapped, air-spaces c are left under each panel, and the metal depressed to form the grooves serves as intermediate bearings or supports, through which the nails or other fastenings may pass, as well as at the joints or overlaps, which latter, as well as the grooves, are oblique to a horizontal line, and hence all moisture or rain is successfully turned, and does not lie to penetrate or corrode the joints.

In forming the grooves a a' the metal is bent on a curve, and hence each panel terminates in an arch, which gives great strength, and at the same time serves to stiffen the face of the panel.

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

Metal sidings for buildings having two or more panels formed in each sheet by intermediate V-shaped depressions or grooves, and with V-shaped grooves at each edge of the sheet to form lap-joints, substantially as and for the purposes set forth.

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

MASON HATFIELD CRITTENDEN.

Witnesses:

C. N. WOODWARD, LOUIS FEESER.