J. L. BOYER.

Method of Applying Nail-Heads on Metal Roofing.

No. 199,957. Patented Feb. 5, 1878.

Fig. 1.

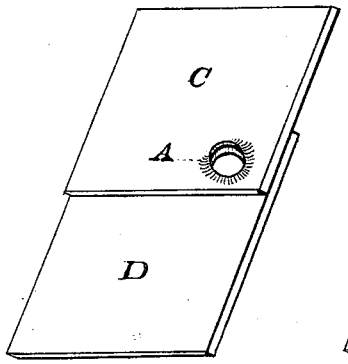


Fig. 2.

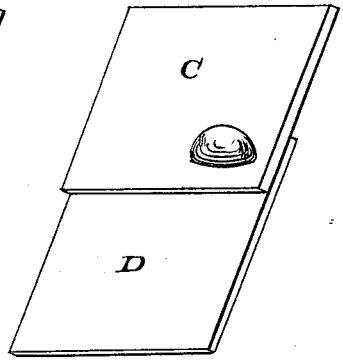


Fig. 3.

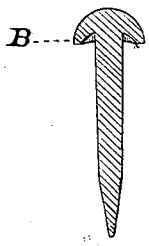
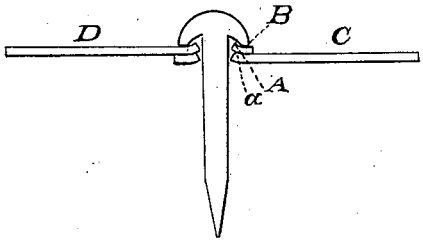


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN L. BOYER, OF CINCINNATI, OHIO.

IMPROVEMENT IN METHODS OF APPLYING NAIL-HEADS ON METAL ROOFING.

Specification forming part of Letters Patent No. **199,957**, dated February 5, 1878; application filed March 15, 1877.

To all whom it may concern:

Be it known that I, JOHN L. BOYER, of Cincinnati, in county of Hamilton, State of Ohio, have invented a new and useful Method of Applying Nail-Heads on Metal Roofing, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents two pieces of plain metal sheets, punched upward and lapped. Fig. 2 shows two sheets lapped with the nail driven home. Fig. 3 is a section of the nail, showing the concave head; and Fig. 4 is a side view of the sheet, showing the projections of the flanges A *a*.

The main objection to corrugated iron or other kinds of metal roofing has been the nail-holes. Driving a nail through sheet-iron causes a depression, or flanging downward, forming a sink or basin to catch and hold the water, thereby rusting both the nail and the sheets until the iron is worn or rusted out and loosened, when the balance of the sheet is perfect.

To obviate this difficulty I punch the iron upward instead of downward, in such a manner as to form a flange that rises above the surface of the sheet.

In the drawings, Fig. 4, the flanges A *a* form a double rim, through which the cup-headed nail, Fig. 3, is driven, the rim B coming down flat on the face of the sheet, outside of the flange A, leaving them above the surface of the sheet, and perfectly protected by the concave head of the nail.

I do not lay any claim to the construction of the cup-headed nail; but

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

The combination of the cup-headed nail with metal sheets punched so that the flange extends upward, substantially as herein described, and for the purpose specified.

JOHN L. BOYER.

Witnesses:
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