

G. MARANVILLE.
Fastening for Roofing-Slates.

No. 203,353.

Patented May 7, 1878.

Fig. 1.

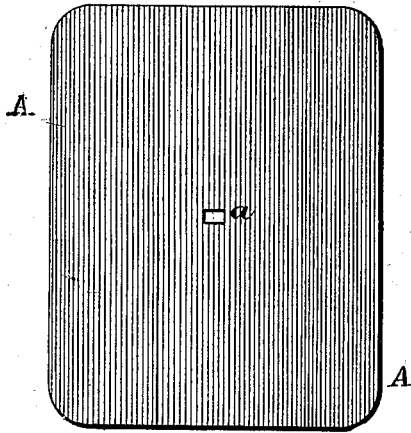


Fig. 2.

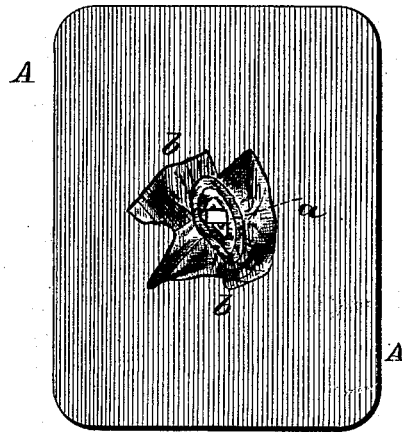


Fig. 3.

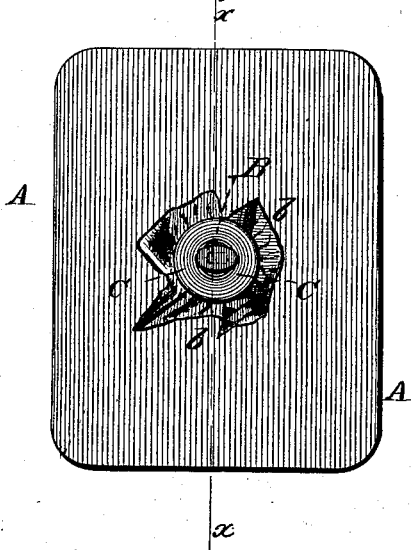
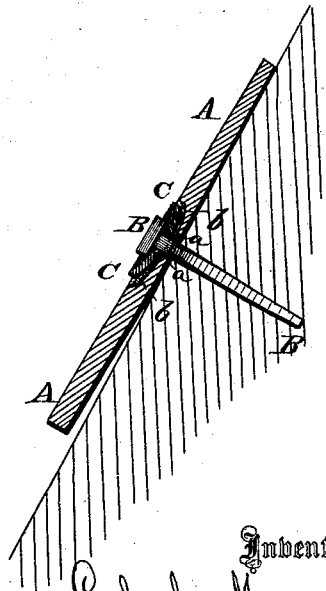


Fig. 4.



Witnesses:

P. Dieterich.
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Inventor:

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Per *C. H. Watson & Co.* Attorneys.

UNITED STATES PATENT OFFICE.

GALUSHA MARANVILLE, OF RUTLAND, VERMONT, ASSIGNOR TO EDWARD BOWMAN AND C. BINGHAM LEACH, OF SAME PLACE.

IMPROVEMENT IN FASTENING ROOFING-SLATES.

Specification forming part of Letters Patent No. **203,353**, dated May 7, 1878; application filed February 16, 1878.

To all whom it may concern:

Be it known that I, GALUSHA MARANVILLE, of Rutland, in the county of Rutland and State of Vermont, have invented certain new and useful Improvements in Slates for Roofing; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to slate used for roofing; and it consists in a soft-metal collar used under the head of each nail for securing the slate, as will be hereinafter more fully set forth.

In the annexed drawings, to which reference is made, and which fully illustrate my invention, Figure 1 is a plan view of a slate. Fig. 2 is a similar view of the opposite side. Fig. 3 is a plan view, showing the collar and nail attached; and Fig. 4 is a central vertical section taken on line *x x*, Fig. 3.

A represents a piece of slate for roofing, with hole *a* punched therein for the passage of the nail to fasten the slate.

The punching of the slate from one side

causes a concave place, *b*, to be formed on the other side around the nail-hole. This side is placed upward, and the concavity often causes the nail B to break through and the slate slide off. For this reason many persons refuse to use slate for roofing, as it is considered a serious objection. To obviate this difficulty, I use a collar, C, made of soft metal, or of some metal that will yield slightly. The nail B is put through this collar, and then through the hole *a* in the slate. This prevents the nail-head from sliding through, and fills up the concavity *b* made by the puncture in the slate, and renders the slate less liable to break, from the fact that the last blow struck on the nail will cause the collar to yield slightly.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A soft-metal collar, C, in combination with slating A and the fastening-nail B, for the purposes herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GALUSHA MARANVILLE.

Witnesses:

EDWARD BOWMAN,
C. B. LEACH.