

S. Taylor.

Batten Roofing.

N^o 13,052.

Patented Jun. 12, 1855.

Fig: 1.

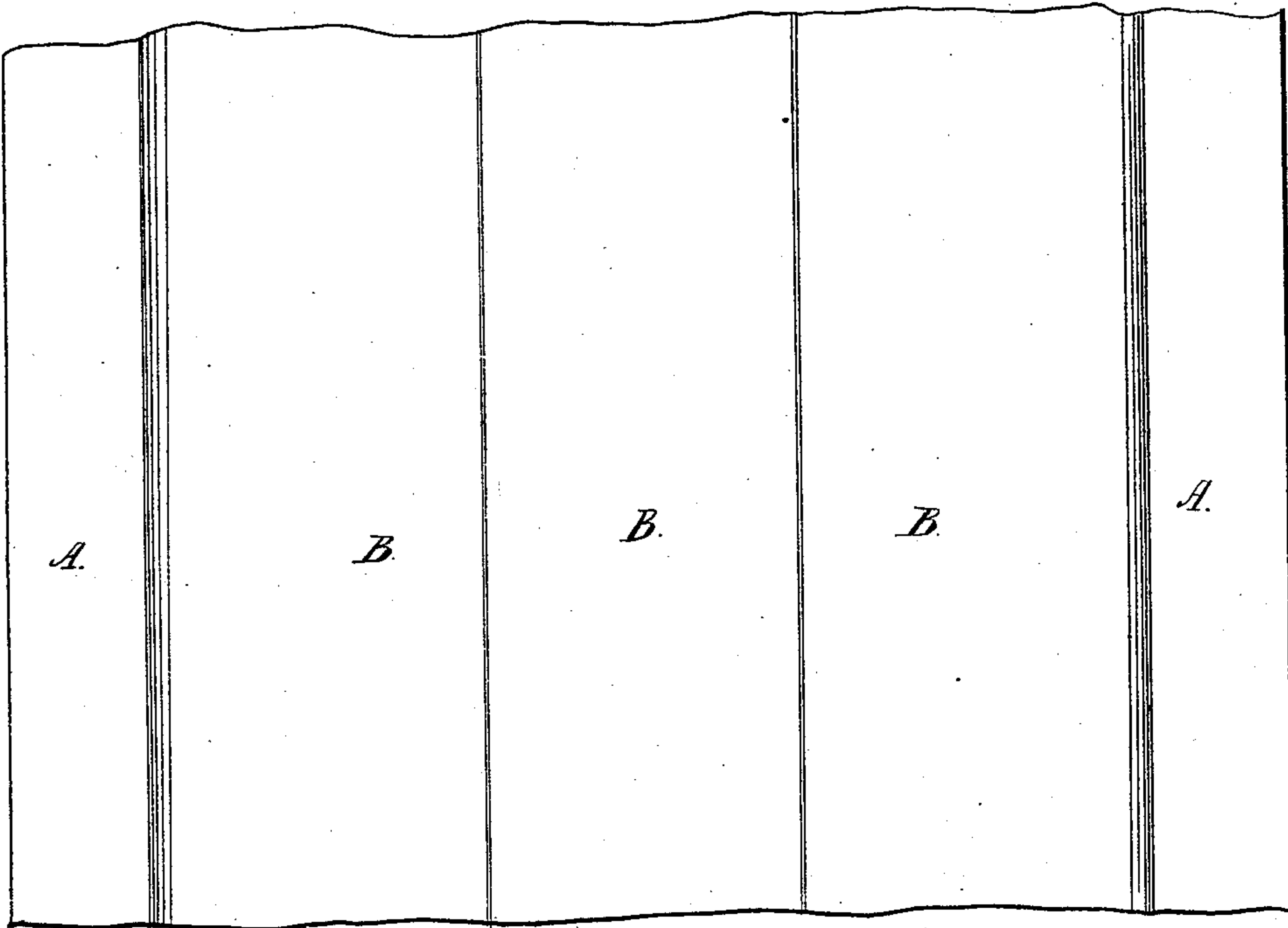


Fig: 2.

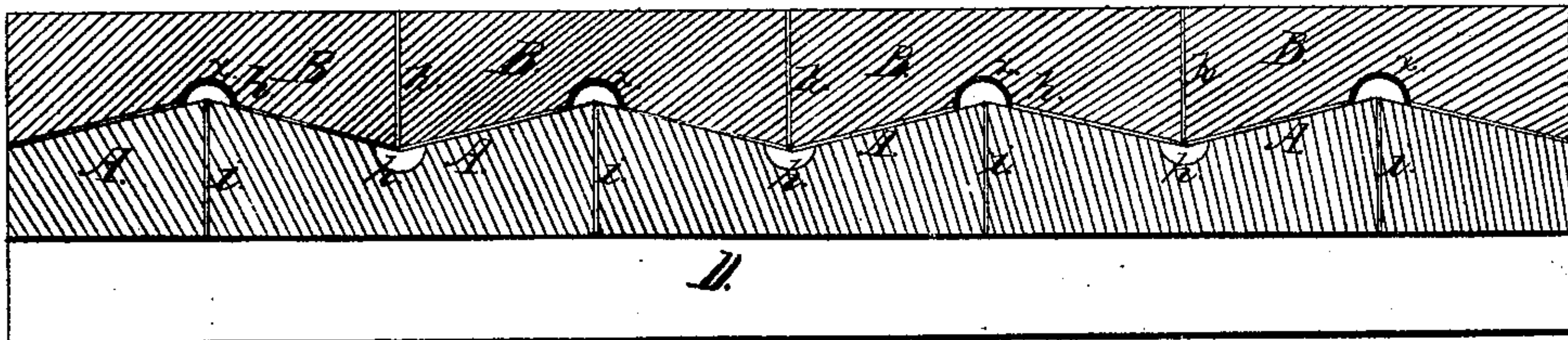


Fig: 3.

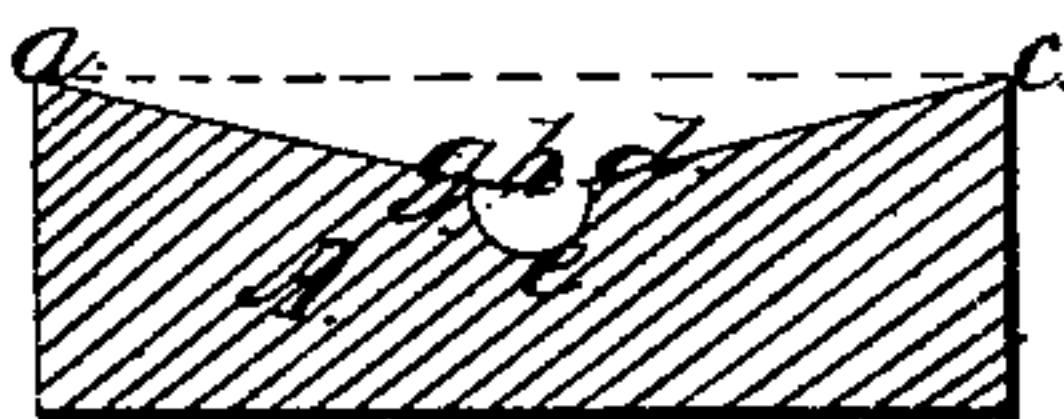
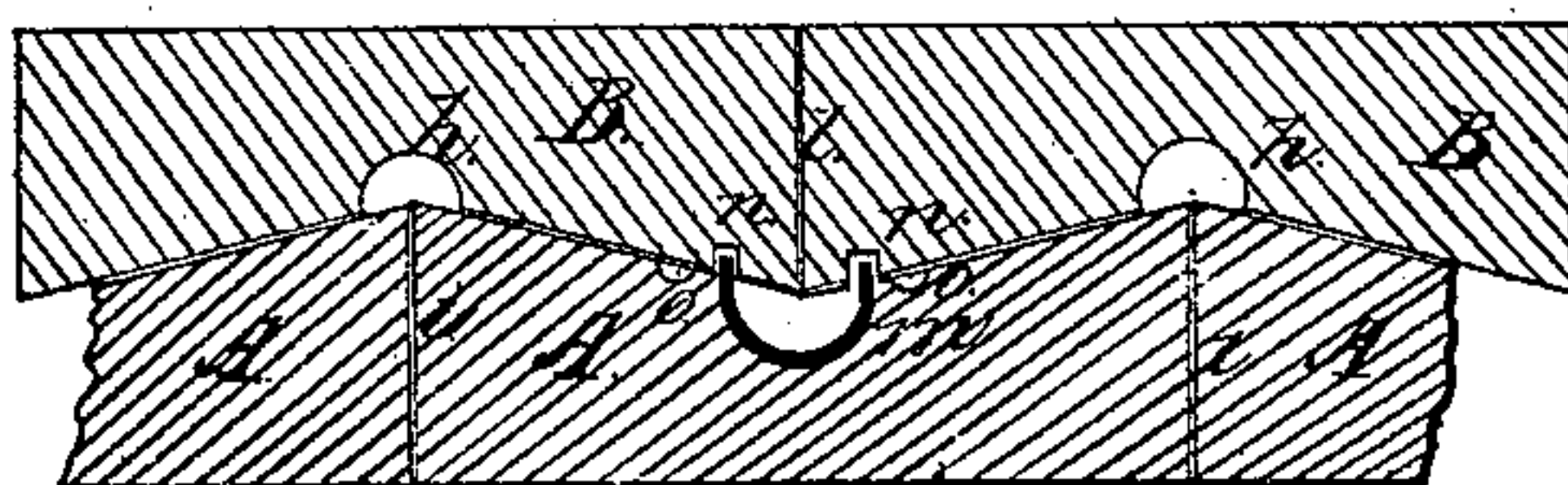


Fig: 4.



UNITED STATES PATENT OFFICE.

SAMUEL TAYLOR, OF PETERSHAM, MASSACHUSETTS.

PLANK ROOF FOR BUILDINGS.

Specification of Letters Patent No. 13,052, dated June 12, 1855.

To all whom it may concern:

Be it known that I, SAMUEL TAYLOR, of Petersham, in the county of Worcester and State of Massachusetts, have invented new and useful Improvements in Board or Plank Roofs for Buildings; and I do hereby declare that the same are fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1, denotes a top view of a portion of a roof constructed in my improved manner. Fig. 2, is a sectional or end view of the same.

In making my said roof, two layers of boards or planks are employed, one being placed over and on the other, so that, the joints of one layer are broken or covered by those of the other. As a general thing the boards of the two layers are to be made equal in width, and each board formed in cross section as seen in Fig. 3.—that is to say, it is to have an isosceles triangular groove, *a, b, c*, taken out of one of its sides, and afterward a channel or groove *g, e, d*, cut at and below the vertex of the angle *b*, the said grooves being made to extend from end to end of the board. It is not essential that the groove *g, e, d*, should in section be an arc of a circle, as it may be triangular, or have any other desirable shape. The board is thus reduced so that a transverse section taken through it will present substantially the appearance exhibited at Fig. 3, and which independent of the groove *g, e, d*, I term the "saddle" form of board.

The lower range of boards is laid with their recessed sides upward, as seen at *A, A, A*, in Fig. 2, while the upper range *B, B, B*, is disposed with their recessed sides downward, as shown in said figure—and so that each one of the upper boards extends over two of the lower ones, and has the groove *h* of it (which answers to the groove *g, e, d*,) directly over and so as to cover the joint, *i*, between the two adjacent boards.

The grooves of the upper boards are each to have a lining of metal or strip, *x*, of metal curved or bent transversely and let into them and made to arch or extend over the joint, *i*. This in case the board should become split or cracked will prevent any rain or water from passing into the joint, *i*, such rain or water being caused to pass down one or both of the adjacent inclined upper surfaces of the two adjacent lower

boards *A, A*, and be discharged into one or both of the gutters or grooves, *h, h*, at the lower parts of such surfaces. These gutters or grooves, *h, h, &c.*, of the lower boards, should be each directly underneath a joint, *h*, between some two of the upper boards as seen in Fig. 2. Any water that makes its way down through such joint, *h*, will pass into the gutter directly under it, and as in laying the roof the boards are to extend lengthwise from the eaves to the ridge and with a slope or inclination to the horizon, such water will course down the said groove and be discharged at its lower end—the contiguous inclined surfaces on opposite sides of the groove or gutter of the lower board preventing the water from passing upward into either of the joints between the board of such groove and the next boards placed on or against its opposite edges.

The grooves or channels may be of a triangular, curved or other proper shape in cross sections, and if desirable the grooves of the lowest tier of boards may be provided respectively with metal or water-tight troughs or linings as seen at, *m*, in Fig. 4, the edges of which may be made to extend up into recesses or grooves *n, n*, plowed respectively in the under surfaces of the two superincumbent boards *B*. In this way the upper ends of the trough, *m*, project above the upper surfaces of the board, *A*, and thereby prevent the water from being drawn up the same by capillary attraction. Smaller grooves or channels *o, o*, may also be used and arranged with respect to the groove, *h*, as seen in Fig. 4, such serving to catch and convey to the eave gutter any water that may escape over the sides of the larger groove *h*.

The two layers of boards thus put together, are by nails to be confined together and to ribs laid on and fastened to the rafters, one of such ribs being seen at *D*, in Fig. 2.

I do not claim making a roof by means of plain boards, rectangular in section or by curved tiles made to overlap each other so as to break joints, nor by means of slates reposing on, or supported by rafters provided, with grooves or channels under the contiguous slates, but

What I claim as my improvement in making roofs, with overlapping wooden boards, is—

1. To make each of the boards of the

saddle form as described, in order that when laid together in manner as above described, their contiguous plane surfaces, may not only lie in close contact, whereby they will
5 aid greatly to the stability and efficiency of the roof, but be so inclined as to prevent water from remaining between them, and causing or promoting their decay, my invention not being a mere change of form, un-
10 attended with any advantage, but one productive of new and useful results in making roofs of wooden boards.

2. I also claim the improvement of pro-

viding each of the grooves of the upper boards with an inverted metallic or water 15 tight lining or trough, α , for the purpose of protecting the joint directly under the same, when the board becomes cracked or split as described.

In testimony whereof I have hereto set 20 my signature this twenty eighth day of March A. D. 1853.

SAMUEL TAYLOR.

Witnesses:

JOHN L. GALLOND,

MARY B. W. GALLOND.