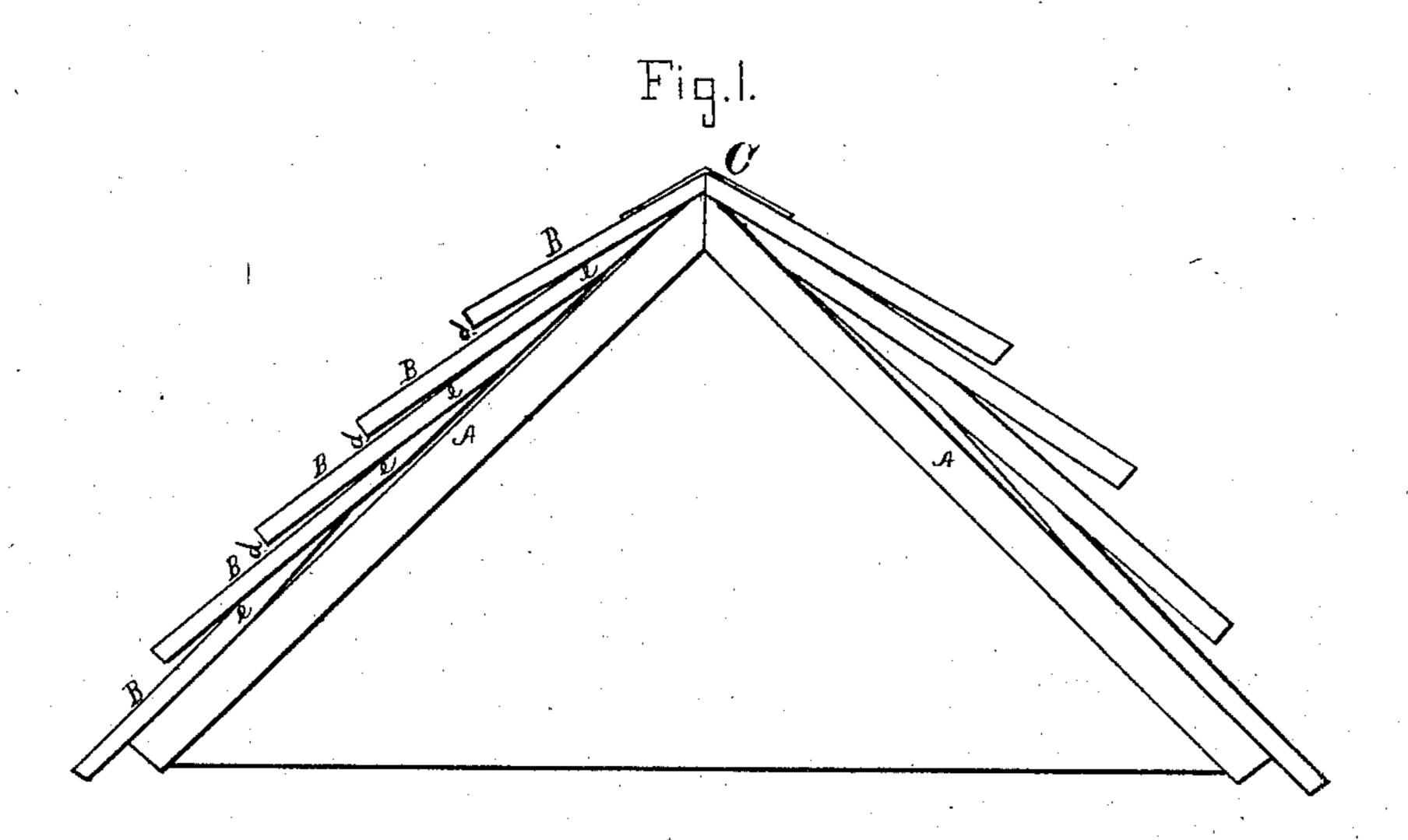
## D. ALTMAN. SHINGLES.

No. 169,666.

Patented Nov. 9, 1875.



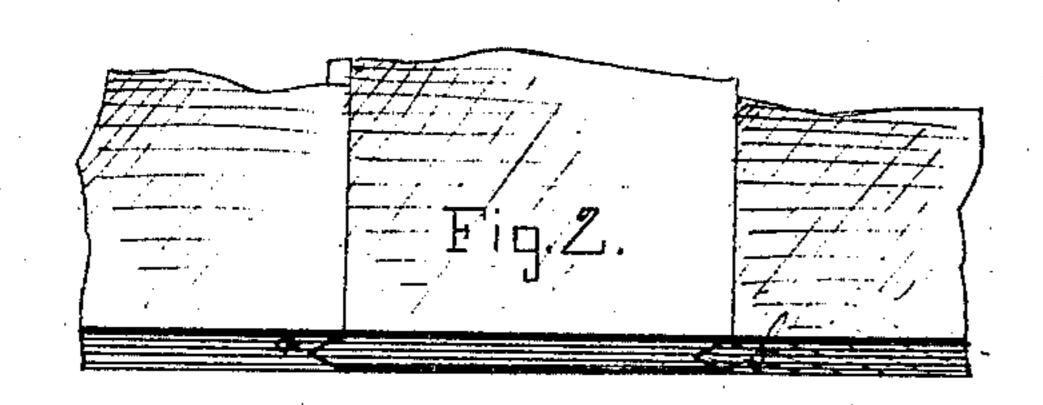


Fig.4.

WITNESSES Thomason, Dolu G. Busman

Savid Altruau Lavid Altruau

## UNITED STATES PATENT OFFICE.

DAVID ALTMAN, OF NASHVILLE, TENNESSEE.

## IMPROVEMENT IN SHINGLES.

Specification forming part of Letters Patent No. 169,666, dated November 9, 1875; application filed October 7, 1875.

To all whom it may concern:

Be it known that I, DAVID ALTMAN, of Nashville, in the county of Davidson, State of Tennessee, have invented certain new and useful Improvements in Shingles for Roofs; and I do hereby declare that the following is a full, clear, and exact description thereof, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings which form part of this specification.

Figure 1 is the end elevation of a shingled roof, showing the shingles as laid after my plan. Fig. 2 is an end elevation of the butt of my shingle, showing the rabbet and groove. Fig. 4 is the edge of the shingle, showing the bevel.

My invention is designed to furnish an improvement in the form of shingles and the mode of laying shingle roofs with a view to making them impervious to water, and at the same time preserve the shingle from the decay incident thereto, in consequence of absorbing and holding water and dampness at the butt, between the layers; and consists in producing a peculiar form of shingle, and in the manner of laying them so that the edge of one will fit into the edge of another, forming one continuous unbroken line, and at the same time securing ventilation enough to keep them dry and to preserve them from rotting.

The shingle is provided with a tongue or rabbet, a, on one edge, while the other edge has a groove, b, corresponding to the tongue, and when laid into the roof the tongue of one shingle is inserted into the groove of another, and so on, each layer presenting an unbroken

surface, while at the same time each shingle so binds its fellow that they will not warp out of shape or place. The tongue and groove of the shingle may be of any known shape, yet

I prefer the V shape, as shown.

My shingle differs from the common shingle further by being beveled but about two-thirds of its length, coming down to the usual thin end, as shown in Fig. 3, so that when the shingle is laid into the roof, instead of hugging the shingle immediately beneath it and the roof, a joint is formed at the angle of the shingle e, and the butt of the shingle is thrown upward and held clear of the underneath shingle, forming a ventilation, d, Fig. 1, as shown, thereby preventing the retention of water or dampness and preserving the shingle from rotting.

I am convinced that a roof laid with this make of shingle, when covered with a ridge-board, C, will be drier and last longer than a

roof of any other style of shingle.

Having now fully described my invention so that those skilled in the art can manufacture and use it, what I deem to be new, and ask to protect by Letters Patent, is—

A shingle beveled but a part of its length and provided with grooved and tongued edges, substantially as shown, and for the purposes

set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of September, 1875.

DAVID ALTMAN.

Witnesses:

HUGH REDDICK, ADOLPH GREENSPAU.