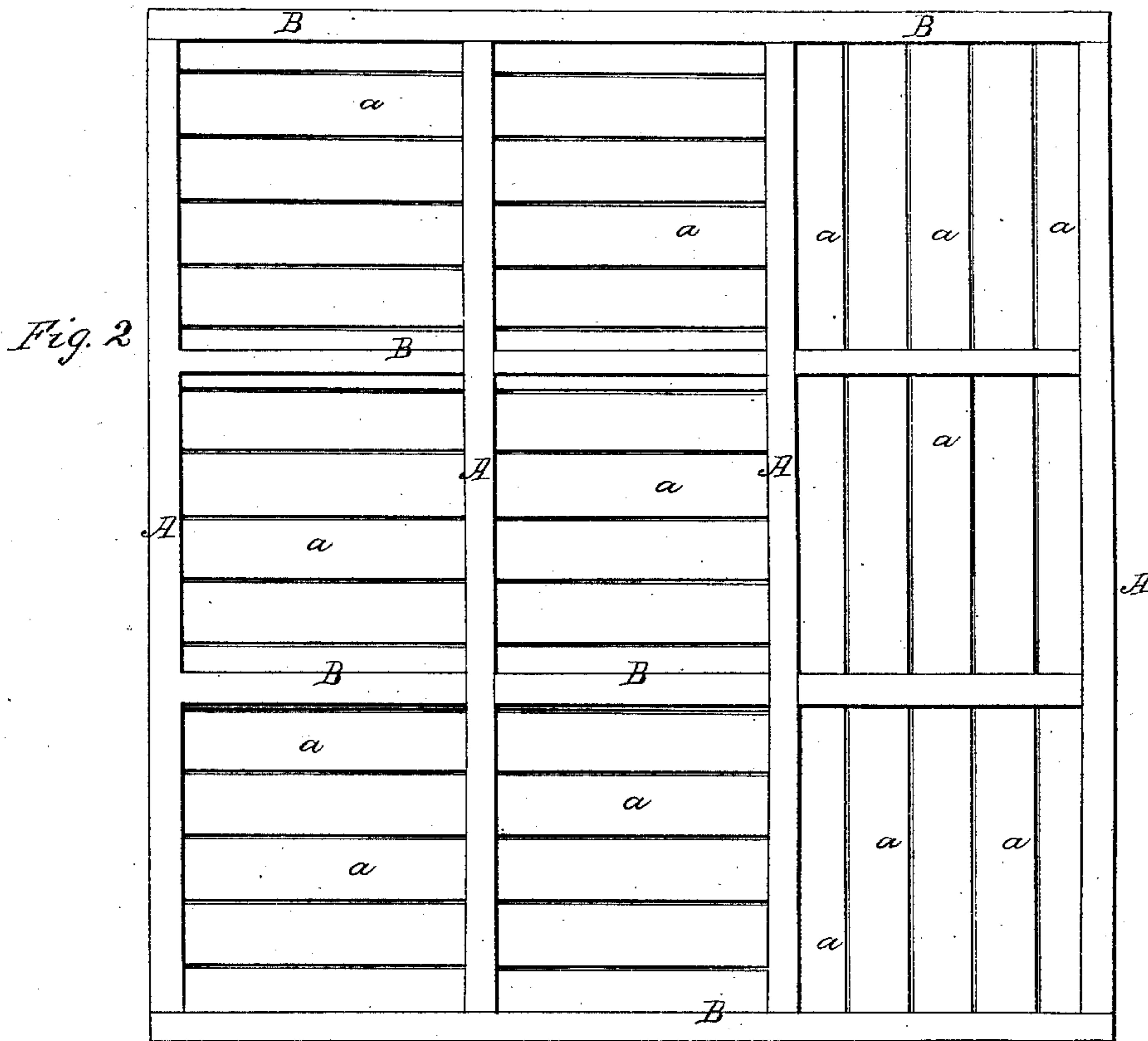
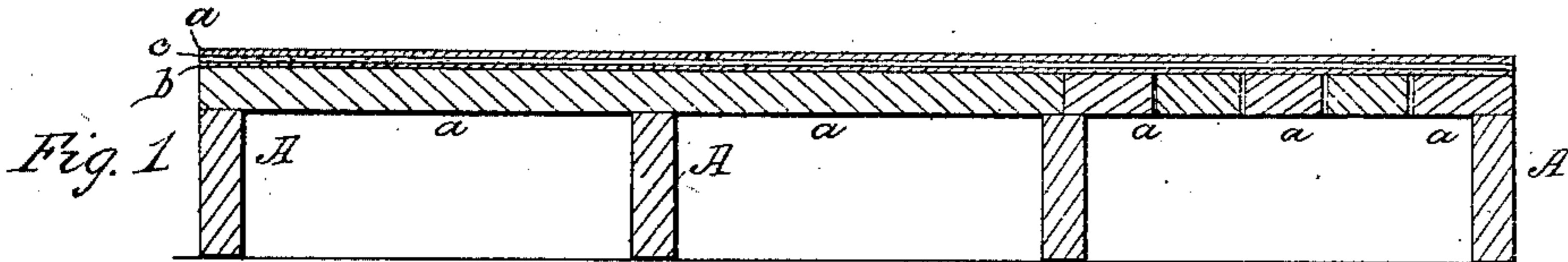
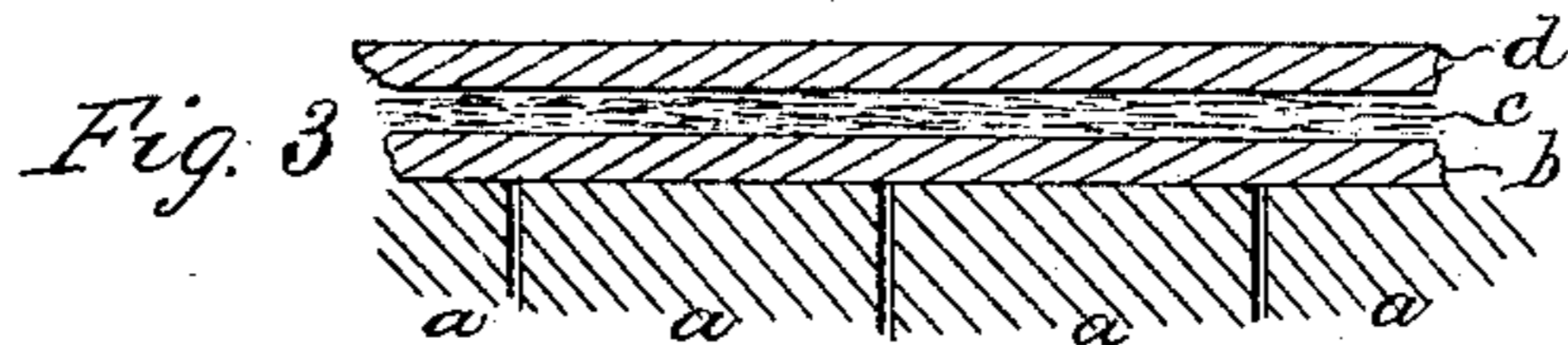


E. Atkinson.

Composite Roof.

N^o 76375.

Patented Apr. 7, 1868.



Witnesses;
Wm. Albert Steel
John Parker

Inventor;
E. Atkinson
By his Atty
H. Howson

United States Patent Office.

EDWARD ATKINSON, OF WRIGHTSTOWN, PENNSYLVANIA.

Letters Patent No. 76,375, dated April 7, 1868.

IMPROVED ROOF.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, EDWARD ATKINSON, of Wrightstown, Bucks county, Pennsylvania, have invented an Improved Roof; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a combination of slats, and of cement and felt applied to the said slats, substantially in the manner hereinafter described, composing an improved roof, in which the disadvantages hitherto attending the employment of felt for roofing purposes are entirely obviated.

In order to enable others skilled in the art to make my invention, I will now proceed to describe its construction, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 represents my improved roof in section.

Figure 2 is an inverted plan view; and

Figure 3 an enlarged sectional view.

A A A A, fig. 1, represent stringers or rafters, forming a framework, upon which are secured lathes or slats of wood, *a*; B B B B, fig. 2, being cross-beams, placed at suitable intervals across the stringers A, so as to impart additional rigidity to the structure. The lathes *a* may be placed in contact with each other, or at intervals, as illustrated in fig. 1, and be arranged in a direction parallel or at right angles to that of the stringers A, as shown in fig. 2. A coating or layer, *b*, of any suitable cement is placed upon the lathes *a*, and upon this cement, while in a plastic state, is placed a coating of ordinary roofing-felt, *c*, which is thus firmly secured to, or, as it were, incorporated with the cement, the felt being then covered with another coating of cement, *d*.

It has hitherto been customary, where felt-roofing has been employed, to attach felt directly to the wood-work of the roof by nailing, the felt being then covered with cement. Roofs thus composed are very likely to become leaky by the slightest warping or shrinkage of the wood-work, to which the felt is secured, the latter being very easily torn, especially at the points where nailed. The felt in tearing carries with it the coating of cement, and thus the interior wood-work is exposed, and leakage is the result. By my invention this disadvantage is entirely obviated, the coating of cement, which intervenes between the wood-work and the felt, to some extent resisting, and to some extent accommodating itself to the shrinkage or warping of the wood-work, and thereby preventing any exposure of the same, while, at the same time, it permanently and effectually secures the felt.

I claim as my invention, and desire to secure by Letters Patent—

A roof, consisting of slats covered with layers of cement, between which is interposed a sheet of felt, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

EDWARD ATKINSON.

Witnesses:

C. N. GRIFFIN,

A. JAMESON.