

J. W. Kingman.

Batten Roofing.

N^o 45,723.

Patented Jan. 3, 1865.

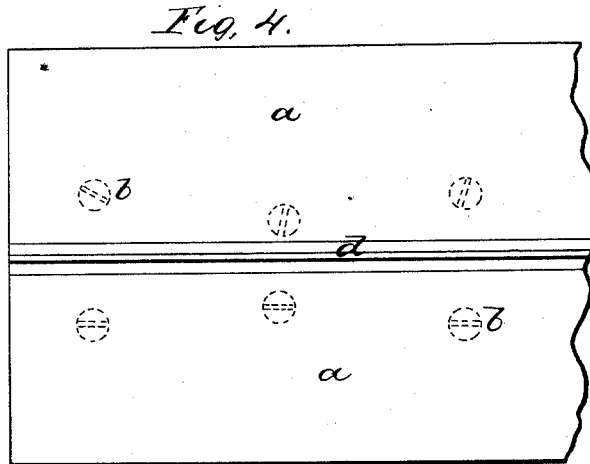
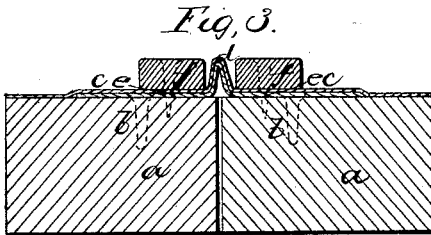
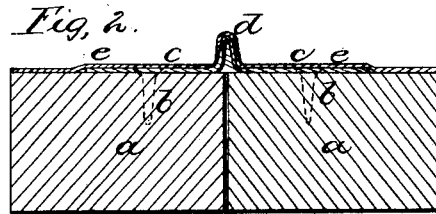
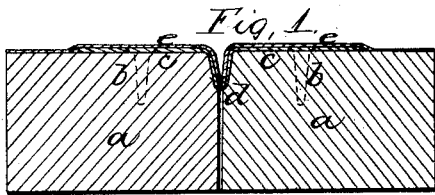


Fig. 5.

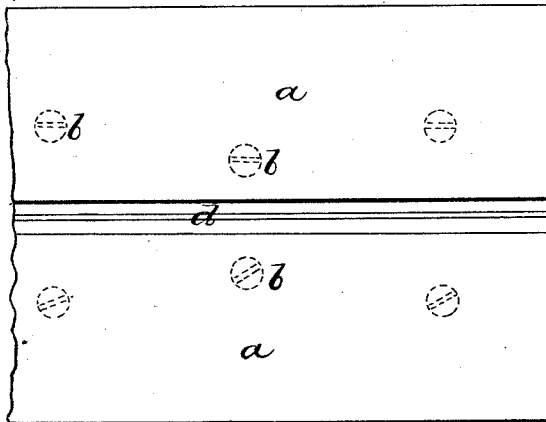
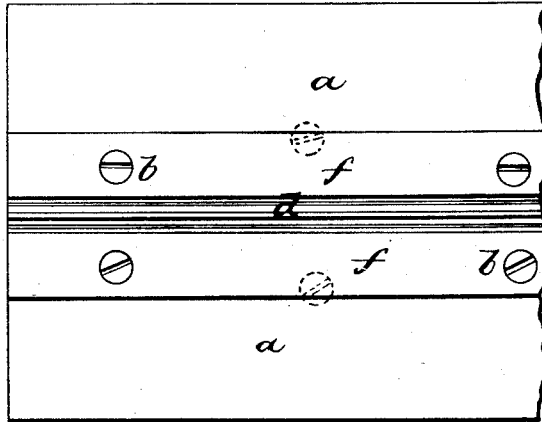


Fig. 6.



Witnesses;
Sam. M. Barton
George W. Munn

Inventor;
John W. Kingman
by his atty
Joseph Garrett

UNITED STATES PATENT OFFICE.

JONH W. KINGMAN, OF NORTH BRIDGEWATER, MASSACHUSETTS.

IMPROVEMENT IN ROOFING.

Specification forming part of Letters Patent No. **45,723**, dated January 3, 1855.

To all whom it may concern :

Be it known that I, JOHN W. KINGMAN, of North Bridgewater, in the county of Plymouth and State of Massachusetts, have invented a certain new and useful Mode of Rendering Roofs, &c., Water-Proof; and I do hereby declare that the following description, taken in connection with the accompanying plate of drawings hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements whereby my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The object of my improvements is to form a cheap mode of rendering roofs and other surfaces water-proof at their joints. It is well known that the expansion and contraction of the materials of which roofs, &c., are composed constitute the greatest difficulty to be overcome, as the opening of the seams or joints is occasioned thereby.

My improvement consists in covering the joint or seam to be protected with a plate or strip of metal so formed as to make a yielding or vibrating connection between the two surfaces that come together, so that the expansion or contraction of the said surfaces will not cause the joint to be exposed or the covering material to be rent asunder or otherwise injured. I fasten this plate or strip over the joint by nailing, and then cover it with a strip of cloth by cementing or pasting. The whole can then be painted.

The figures in the accompanying plate of drawings represents my improvements.

Figures 1, 2, and 3 are sections showing the different modes in which my improvement may be applied, and Figs. 4, 5, and 6 are top views of the same.

a a in the drawings represent two boards or pieces, the joint of which is to be covered and protected. Over the seam, between these two pieces, is fastened by nails or screws *b b*, &c., a plate or strip of metal, *c*, bent so as to form a spring, *d*, located immediately over the seam or joint between the two pieces *a a*. By this means it will be seen that if from any cause the two pieces *a a* either contract or expand the spring-plates *c d* will yield a little accordingly, and at the same time will form a complete covering to the seam or joint, so as to effectually exclude all water or moisture.

To prevent the plate *c d* from corrosion, I cover it by cementing or pasting with cloth *e*; or it may be simply coated with paint or other water-proof material.

The spring-joint *d* may project above the pieces *a a*, Figs. 2 and 3, in which case I protect it by a strip of wood, *f*, on either side, or may extend down between the two pieces *a a*, as shown in Fig. 1.

It will be seen from the foregoing description that by my improvement an extremely simple mode of roofing is obtained, and at a very cheap rate, and, moreover, it is particularly desirable for the roofs of railway-carriages, &c., which are subject to a continual vibration and straining of the parts, which occasion the seams to open.

I do not claim a simple channel or gutter placed in a seam or joint to be protected; but

What I do claim as my invention, and desire to have secured to me by Letters Patent, is—

The spring-plate *c d*, fastened as described, and covered with cloth cemented or pasted thereon, substantially as specified.

JOHN W. KINGMAN.

Witnesses:

JOSEPH GAVETT,
SAML. M. BARTON.