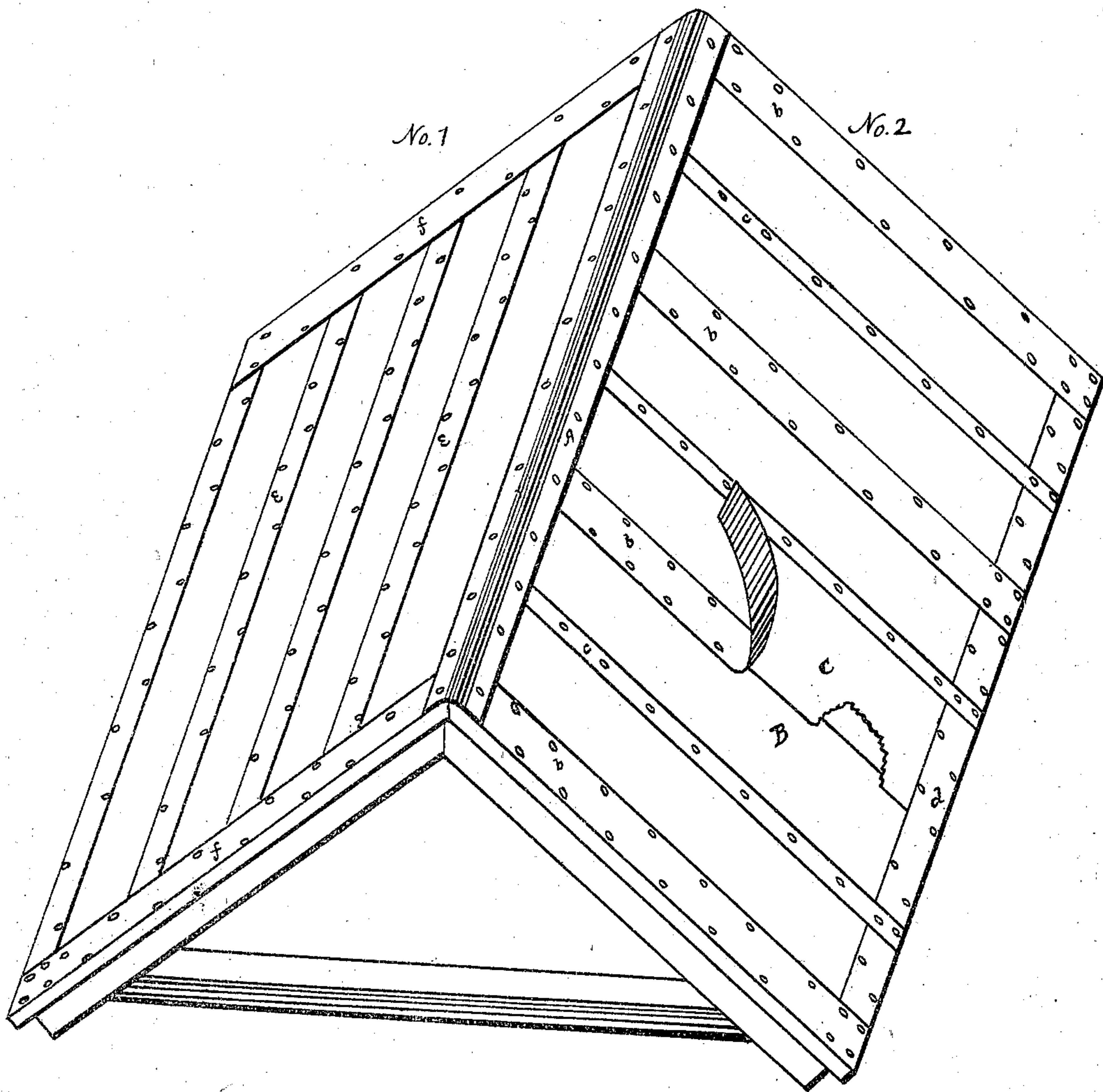


R. U. PIPER.  
Covering for Roofs.

No. 134,702.

Patented Jan. 7, 1873.



WITNESSES

C. L. Root

J. E. Savage

INVENTOR

Richard U. Piper

by Charles Page

Att'y.



# UNITED STATES PATENT OFFICE.

RICHARD U. PIPER, OF GIRARD, MICHIGAN, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO MONROE HEATH, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN COVERINGS FOR ROOFS.

Specification forming part of Letters Patent No. 134,702, dated January 7, 1873.

*To all whom it may concern:*

Be it known that I, RICHARD U. PIPER, of Girard, in the county of Branch and State of Michigan, have invented certain new and useful Improvements in the Covering of Roofs; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

My invention relates to that class of roofs which are protected by a covering consisting of sheets commonly called "board" or paper board, or of sheets of other flexible covering, consisting of canvas or any other fibrous material; and it consists in the application of metallic strips upon such sheets, when they are applied to a roof, so that the same will be securely held in place and the covering rendered perfectly water-proof.

Heretofore sheets of paper, &c., have been attached to roofs of buildings by nails and cement, and such sheets, by reason of their exposure to weather, invariably break away from the nails or cement, curl up at their edges, and allow water to leak through the roof. Moreover, such sheets are often torn entirely off by the violence of the wind.

These and other defects I overcome by the use of metallic strips, which I arrange upon the beforementioned roof-covering sheets in substantially the following manner:

Sheets of paper board, canvas, &c., previously rendered fire-proof in their manufacture, are laid upon a roof either transversely or longitudinally, and where two such sheets meet their adjacent edges are lapped over, as shown at B C in the accompanying drawing, where I have represented one of the strips curled up in order to show the lapping-edges of two sheets, and also represented a portion of one sheet torn away, in order to more clearly show the same. If the sheets of roofing material are laid as shown at the side No. 2, then the lower edges of the sheets are secured by a metallic strip, *d*, the laps of the sheets are covered by strips *b*, and narrow

strips are laid upon said sheets to give them additional security. These strips are fastened down by nails, screws, or other equivalent means. A broad strip, *A*, previously shaped to the angle of the roof or otherwise, is then fastened to the top of the roof and over the ends of the strips *b c*, as shown. If the sheets are laid with regard to the length of the roof, as shown, at the side marked No. 1, the edges which meet are overlapped, and strips *e e* fastened down upon the same. The ends of strips *e e* are covered by strips *f f*, which also protect and secure the end edges of the sheets of roof-covering material, and then the cap-strip *A* is applied in the manner hereinbefore referred to.

By such means a simple, cheap, and effectual fire-proof roof is obtained, which excludes the possibility of leakage, or of the sheets of roofing material being accidentally torn off, and by which I am enabled to form a strong, saferoof-covering, which shall consist of sheets of paper board, canvas, or other fibrous material.

It is obvious that variations with regard to the number, size, and position of the strips may be made without departing from my invention, and that the strips may be made of brass, copper, iron, or any other metallic or equivalent substance. I especially desire that the material should be either naturally non-combustible or else artificially rendered so.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The method of securing sheets of board, paper board, canvas, or other fibrous material upon roofs, by means of thin metallic or equivalent strips applied and arranged substantially as and for the purpose herein shown and set forth.

RICHARD U. PIPER.

Witnesses:

MUNROE HEATH,  
JAS. G. SAVAGE.