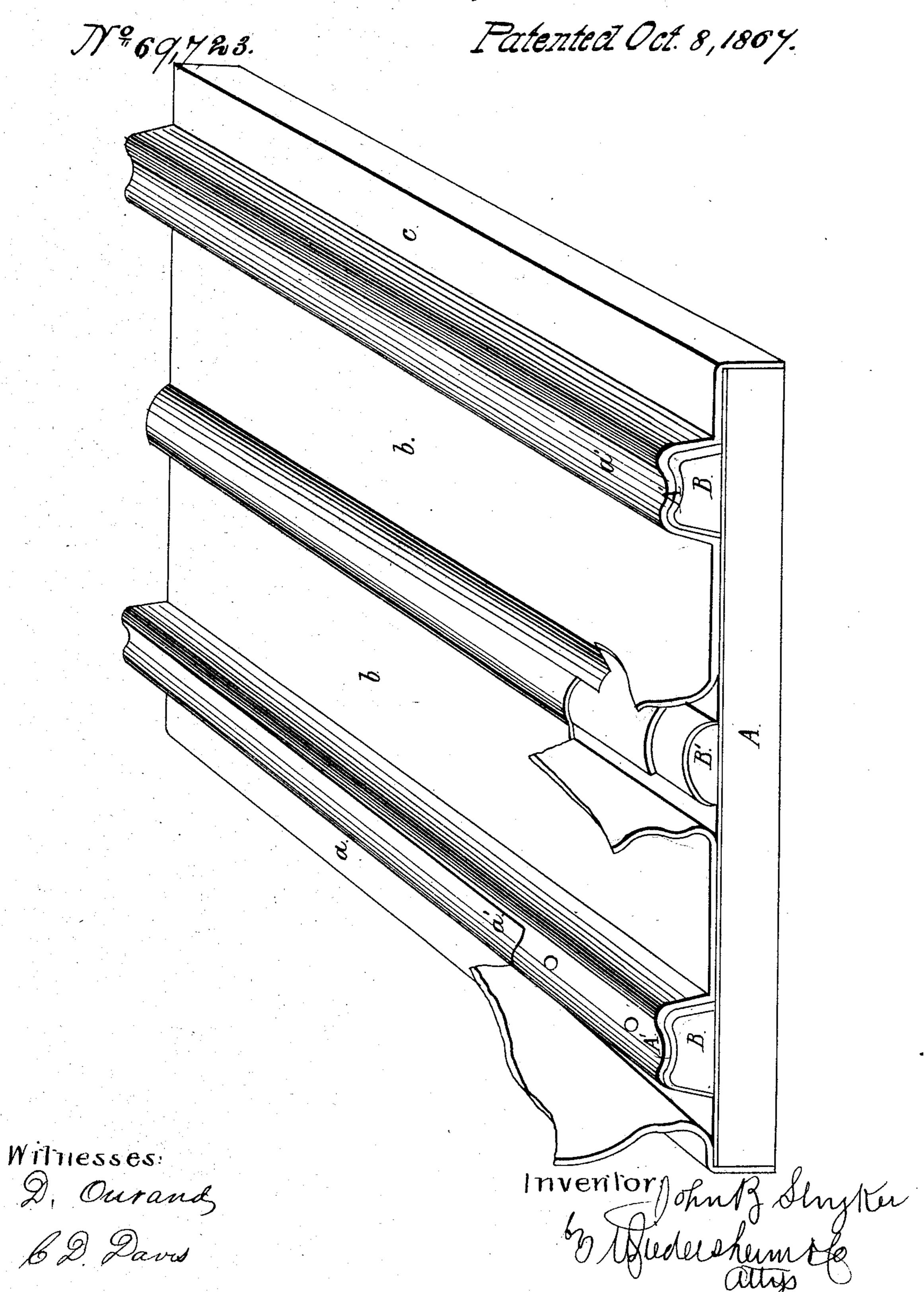
J.B. Stryker.

Metallic Roof.



THE GRAPHIC CO.PHOTO-LITH.39 & 41 PARK PLACE, N.Y.

## Anited States Patent Pffice.

## JOHN B. STRYKER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 69,723, dated October 8, 1867.

## IMPROVED METAL ROOFING.

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

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, John B. Stryker, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Mode of Putting on Metal Roofing; and I do hereby declare the following to be a full, clear, and exact description of the nature thereof, which will enable others skilled in the art to which it appertains to fully understand and use the same, reference being had to the accompanying drawing, making part of this specification, and which represents a perspective view of a roof constructed according to my invention.

This invention consists in applying grooved strips directly to the roof, and on which the ends of metal sheets are secured, the end of one being nailed to the strip, the nails passing through which and into the roof, and the end of the adjacent sheet overlapping and covering the end of the nailed sheet, and soldered thereto, whereby the ends of both sheets are secured to the same strip, thus admitting sufficient room or play for the expansion and contraction of the metal without detriment thereto, as will be hereinafter more fully described.

In the drawing, A represents an ordinary wood roof, on the upper side of which I place at proper intervals strips B, extending from top to bottom of the roof. These strips are of suitable form, but grooved on their upper sides for the distance of their lengths, as shown at A'. a represents a sheet of metal, one end of which is secured on the under side of the roof by beads, or other suitable means. b is the adjacent sheet, one end of which is passed over the strip B; and is secured thereto by nails or equivalents, which pass through the strip into the roof, so that they accomplish two results, viz, securing the metal to the strips and the strips to the roof. The inner end of sheet a is then passed over the nailed end of sheet b, and soldered thereto at the inner upper termination of the groove A', as shown at a'. It will thus be seen that there is no exposure of the seam, and water will flow down the groove without any opportunity to pass to the roof through the seam a', which, if not entirely closed, would be the only communication with the roof. The next sheet, c, is then secured to the strip B the same as sheet b, and the inner end of sheet b is brought over to overlap the nailed end of the sheet c, and then secured by soldering, as in the previous case. The remaining sheets of metal are applied in the same manner as the other ones, and the side and end of the last sheet are secured by mouldings or other suitable means to the under side of the roof.

When the roof is liable to be affected by the wind, I employ an oval strip, B', which is encased or covered by metal, and the sheet passed over the same. The strip will be nailed to the roof, and the sheet be soldered to the metal on the strip.

As I employ a metal which is self-soldering, it will only be necessary to apply the soldering-iron on the metal, and it will immediately solder with the sheet in contact with it. It will also be seen that the metal is of so ductile a nature that the strips will be readily lapped by merely pressing the metal over the strips with any suitable tool.

A metal roof constructed according to my invention will allow of free expansion and contraction of the metal, whether caused by heat or cold, or the cracking or warping of the wood underneath. No seams are exposed to the wind or water, and, as the nails or screws are concealed, there is no possibility of the metal being torn by the force of the wind.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is-

A roof composed of transverse sheets a b c, one side of each of which is passed over and nailed to grooved strips B, and the other side soldered to the adjacent sheet over the strip, and covering the edge of the first sheet, whereby neither the means of fastening nor the seams are exposed, substantially as described.

To the above I have signed my name this second day of May, 1867.

JOHN B. STRYKER.

Witnesses:

H. H. SMITH, EPHRAIM P. FRAZER.