

C. LEWANDO.
Metallic Roofings.

No. 140,928.

Patented July 15, 1873.

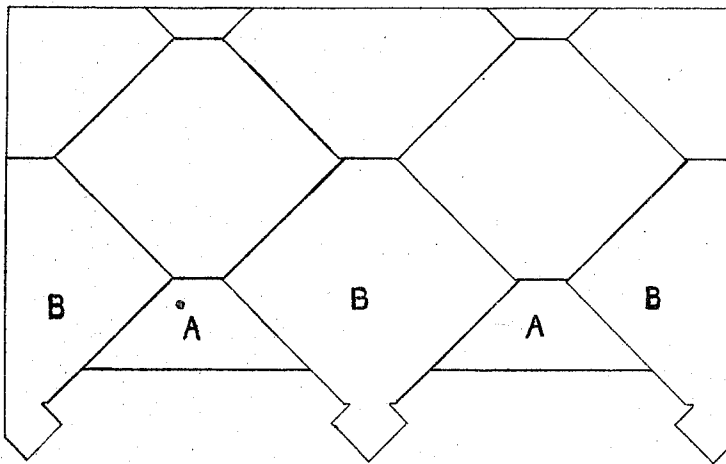


Fig. 1

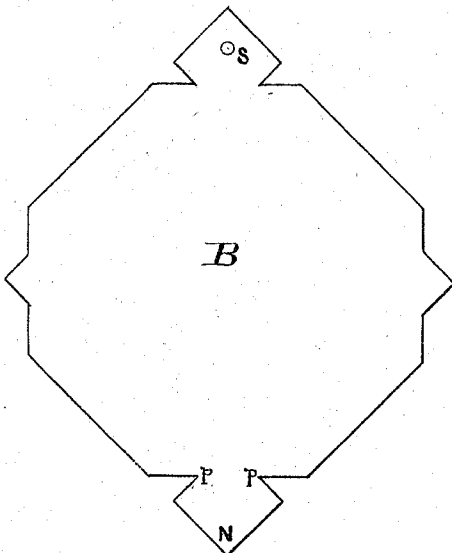


Fig. 2

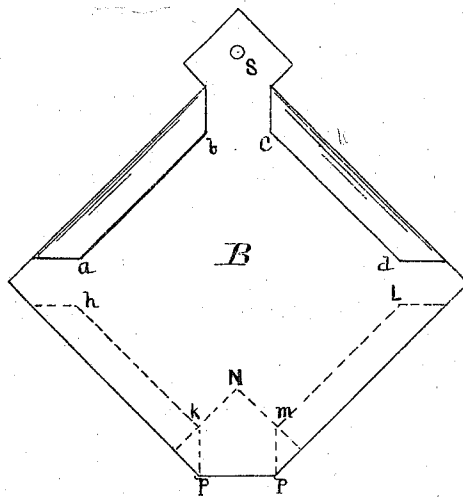


Fig. 3

WITNESSES

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CHARLES LEWANDO, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN METALLIC ROOFINGS.

Specification forming part of Letters Patent No. **140,928**, dated July 15, 1873; application filed December 21, 1872.

To all whom it may concern:

Be it known that I, CHARLES LEWANDO, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Metallic Roofing, of which the following is a specification:

The nature of my present invention consists in an improvement on the roofing for which Letters Patent were granted to me the 26th of March, 1872, and numbered 124,963; the object being to so fold and arrange the plates that the nail by which they are fastened to the roof may be entirely covered.

Figure 1 is a plan, showing a portion of a roof covered according to my improved method. Fig. 2 represents the shape of one of the plates before it is bent or folded. Fig. 3 represents one of the plates after it has been bent or folded and ready for placing upon the roof.

B B in Fig. 1 represent the separate plates of which the roof is composed, these plates being shown in detail in Figs. 2 and 3. I cut the plate into the form shown in Fig. 2, after which the fold *a b* and *c d*, Fig. 3, are bent over the top of the plate, and the folds *h k* and *l m* are bent under the plate, so that the fold *a b* and *c d* of one set of plates will lock into the folds *h k* and *l m* of the adjacent plates.

The part *p p N* of Fig. 2 is folded under the plates, as indicated by dotted lines in Fig. 3.

The new feature in the roofing consists, mainly, in the part *N p p*, which is folded under, and serves as a lock for the lower corner of each plate and dispenses with the necessity of nailing this part. Each plate is made fast by a nail at the upper corner *s*, Figs. 2 and 3.

My roofing is laid as follows: The first row consists of half-plates A A A, as shown in Fig. 1; these are nailed at the upper angles and the joints filled with cement; then the second course B B are locked onto the first and nailed in the same manner. The lower fold *N p p* is bent under and forms a complete lock-joint at the lower angle.

From the above it may be seen that each plate is nailed at one point only, so that it may expand or contract without injury.

I claim as my invention—

The metallic roof, when the same is formed by uniting the plates A A and B B, &c., cut and folded and arranged substantially as described, and for the purpose set forth.

CHARLES LEWANDO.

Witnesses:

FRANK G. PARKER,
CHAS. J. BATEMAN.