

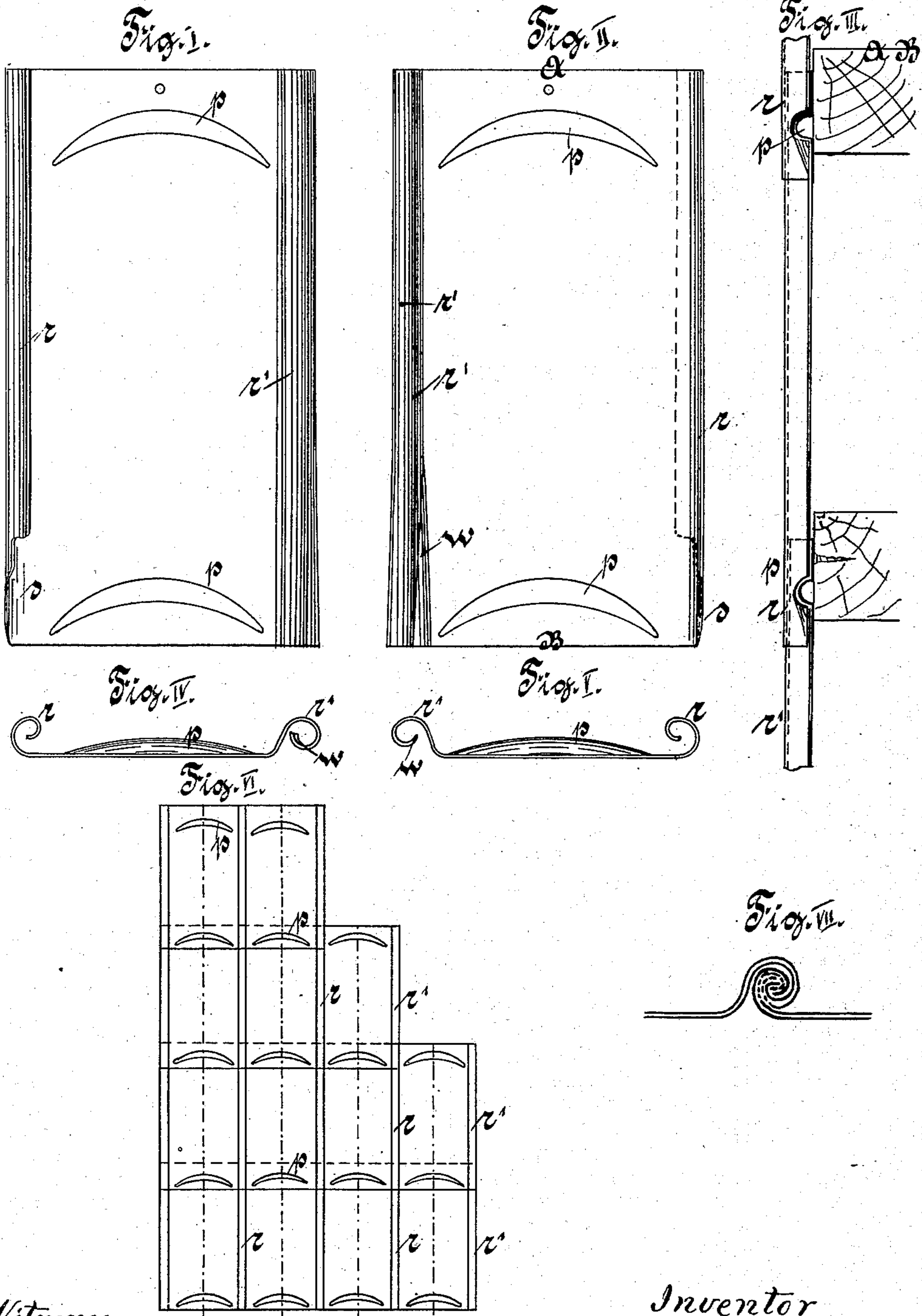
(No Model.)

G. A. NEBELING.

METALLIC PLATE FOR COVERING ROOFS AND WALLS.

No. 317,176.

Patented May 5, 1885.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## METALLIC PLATE FOR COVERING ROOFS AND WALLS.

SPECIFICATION forming part of Letters Patent No. 317,176, dated May 5, 1885.

Application filed February 19, 1885. (No model.) Patented in Germany January 13, 1883, No. 23,238.

*To all whom it may concern:*

Be it known that I, GOTTFRIED AUGUST NEBELING, a subject of the King of Prussia, Germany, residing at the city of Remscheid, in the Kingdom of Prussia, have invented a new and useful Improvement in Metallic Plates for Covering Roofs and Walls, (for which I have obtained a patent in the German Empire, No. 23,238, dated January 13, 1883,) of which the following is a specification.

Figures I and II are plan views of two pieces of metal used in my roofing. Fig. III is a longitudinal section of metal plates in position in the roof. Fig. IV is a cross-section of Fig. I. Fig. V is a cross-section of Fig. II. Fig. VI is a plan view of portion of roof. Fig. VII is a detail of joining edges of metal plates.

The object of this improvement is to provide metal plates for roofing, which will render the roof water and snow proof, as will hereinafter appear. The plates are rectangular in form, with their two opposite sides cylindrically rolled up, one side being rolled upward and the other or opposite being rolled downward. (See Figs. IV and V.) The roofing is formed by shoving the rolled edges of one plate into the rolled edges of another plate, and the end of one plate being shoved over the end of another. In position in the roof at the corners of the plate there are four plates interlocked together. In order to easily accomplish this, one end of each plate—usually the lower end—has been peculiarly shaped by cutting away a portion of the rolled edges, Figs. I and II, as far up as the overlapping of the ends extend. This cut of the rolled edges may be in step form, Figs. I and II, at *s*; or it may be a continuous incline, as at *w*, Fig. II, the upwardly-rolled edge being cut away more than its opposite, the downwardly-rolled edge. By such a formation of the edges

at their joining corners an easy joining of the plates is permitted without impairing in the least the closeness of fit.

The joining of the edges at the corners of the plates is shown in Fig. VII in cross-section, the cut-away edges being indicated by dotted lines.

The simple laying of the plates over one another at their ends does not insure a satisfactory closeness of fit. This evil is remedied by forming ribs *p* in each plate and near each end, the ribs being pressed upwardly in each plate, and from the same side and of the same shape or form, having at their centers the greatest width and depth. When the plates are placed in position, these ribs embrace each other, Figs. III and VI. Preferably these ribs are crosswise of the plate and in circular form, gradually rising from each end to the center, Figs. IV and V. These ribs prevent the ends from springing or buckling, and insure a satisfactory joint at the ends of the plates.

I claim—

1. The rolled edges of the metal plates with cut-away parts at one end to the extent of overlapping ends, whereby the corners of four plates are easily and safely joined together without impairment of joint, substantially as and for the purpose shown.

2. The ribs *p* at each end of the plates, all raised from same side of plate, in combination with rolled edges of the metal plates provided with cut-away ends thereof, all constructed and arranged substantially as shown.

In testimony that I claim this as my own I have hereunto set my name in the presence of two subscribing witnesses.

GOTTFRIED AUGUST NEBELING,

Witnesses:

HERMANN THISLENS,  
HUGO KÖSTER.