

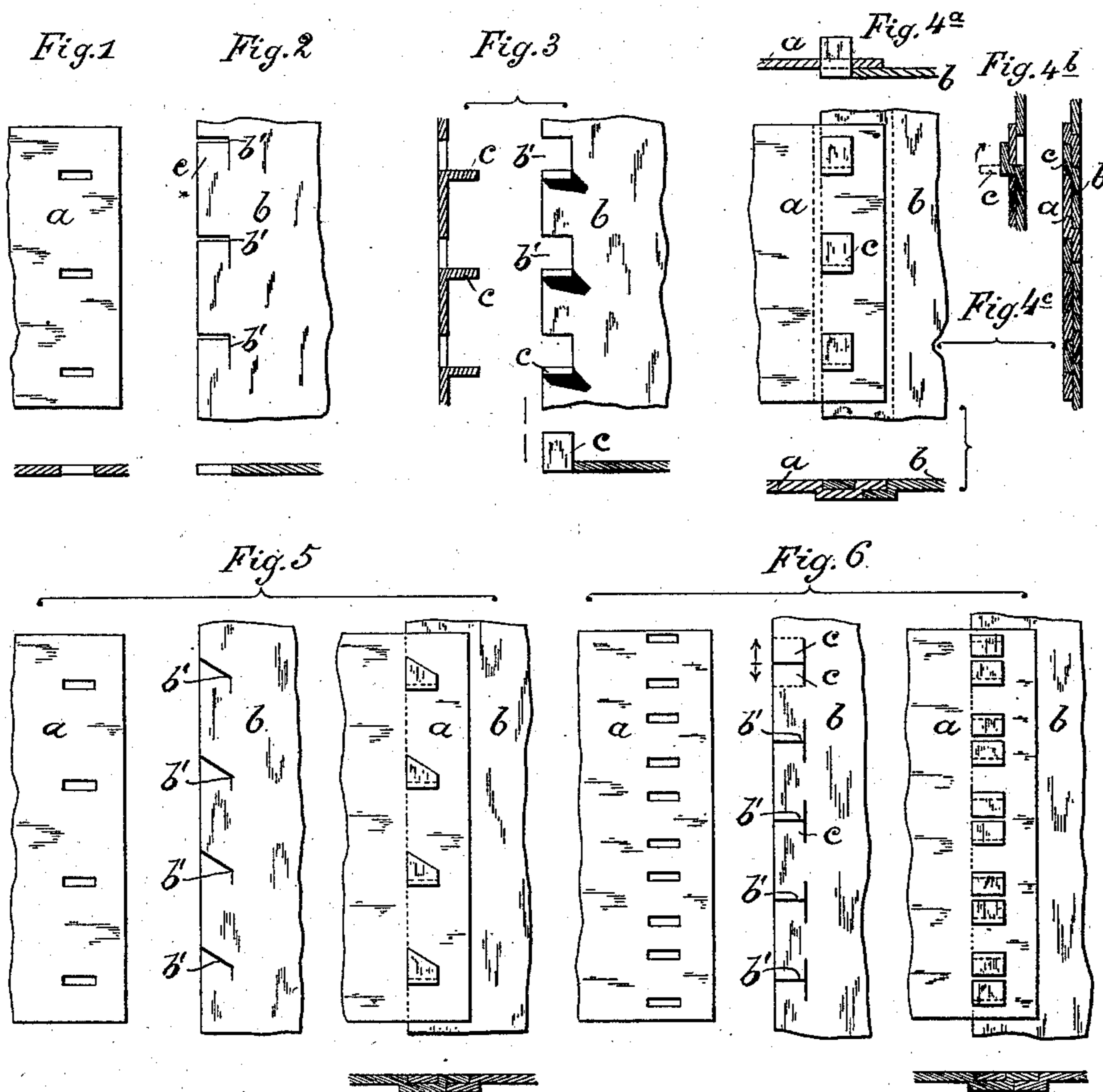
(No Model.)

F. C. BELLINGER.

INTERLOCKING THE EDGES OF METAL PLATES.

No. 384,118.

Patented June 5, 1888.



Witnesses.

Geo. H. Rea.

Albert G. Pratt.

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# UNITED STATES PATENT OFFICE.

FRANZ CARL BELLINGER, OF FULDA, PRUSSIA, GERMANY.

## INTERLOCKING THE EDGES OF METAL PLATES.

SPECIFICATION forming part of Letters Patent No. 384,118, dated June 5, 1888.

Application filed July 19, 1887. Serial No. 244,753. (No model.)

*To all whom it may concern:*

Be it known that I, FRANZ CARL BELLINGER, a subject of the King of Prussia and Emperor of Germany, and a resident of Fulda, Province of Hesse-Nassau, Germany, have invented new and useful Improvements Relating to the Joining or Uniting of Metal Plates, of which the following is a specification, reference being had to the accompanying drawings.  
10 This invention relates to that class of joints for metal plates where slots in one plate are engaged by lips on another plate and the lips subsequently rolled down.

The object of my invention is to provide a novel construction whereby the edges of the sheet-metal plates are efficiently connected and a perfectly-tight joint provided.

The invention consists in the features of construction hereinafter described and claimed, reference being made to the accompanying drawings, in which the figures are plan and sectional views exhibiting my invention.

In Figure 1 the edge of the plate *a* contains at certain distances apart narrow slits, the width of which is not larger than the thickness of plate, and the length of which must be chosen according to the width of the joint to be made. The edge of the second plate, *b*, is formed with angular incisions at the same distance apart as the slits in the first plate, *a*, and the laps *c* thereby produced are bent up at right angles to said plate, as shown in Fig. 3. These laps are then inserted in the slits of the first plate, *a*, Fig. 4<sup>a</sup>, after which they are bent back into their original positions as far as possible. (See Fig. 4<sup>b</sup>.) The projecting laps *c* are now pressed into the first plate, *a*, by rolling over the seam, Fig. 4<sup>c</sup>, which

is easily accomplished, because in the second plate, *b*, exist the corresponding holes caused by the bent-up laps *c* on said plate, the result being a flat pad of the section shown in Fig. 4<sup>c</sup>, in which there are no longer any protrusions, and the thickness of plate is everywhere equal to that of two single plates. The shape of the lap bent up rectangularly can be varied at will. Fig. 5 shows trapeziform laps; Fig. 6, rectangularly two-sided laps, which are bent up to the right and left of the slit, and fit into corresponding slits in the first plate, *a*. The shape of the laps can be varied according to requirement.

By forming the plate *b* with the angular incisions *b'*, so that they extend directly from edge inwardly to form the laps *c*, the joint can be made tighter than heretofore.

I am aware that sheet-metal pipes have been made from a sheet of metal having straight slots near one edge and lips at or near the opposite edge to engage the slots; but such is not my invention, and I do not wish to be understood as claiming the same.

What I claim is—

The plate *b*, having angular incisions *b'* extending directly from the edge of the plate into the body thereof and then at an angle, whereby said plate is provided with angular laps *c*, in combination with the plate *a*, provided near one edge with slots to receive said laps, substantially as shown and described.

In witness whereof I have signed the foregoing specification this 17th day of June, 1887.

FRANZ CARL BELLINGER.

Witnesses:

ALVESTO S. HOGUE,  
JEAN GRUND,