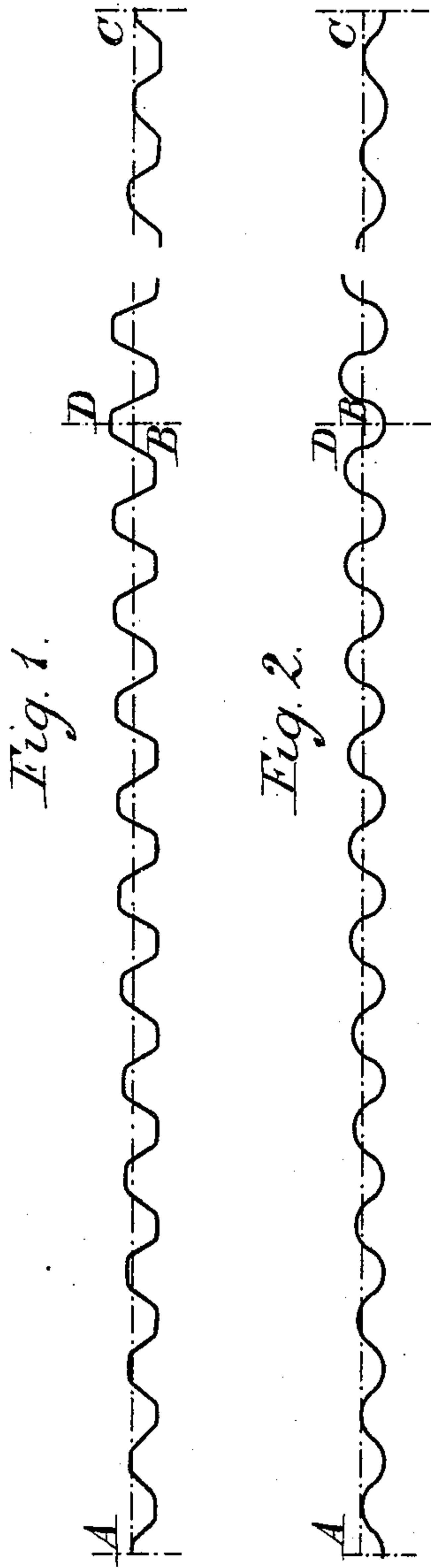


(No Model.)

R. BAILLIE.  
CORRUGATED PLATE.

No. 390,941.

Patented Oct. 9, 1888.



*Witnesses,*  
*J. A. Rutherford.*  
*Robert Emmett.*

*Inventor:*  
*Robert Baillie.*  
*By*  
*James L. Norris.*  
*Atty.*

# UNITED STATES PATENT OFFICE.

ROBERT BAILLIE, OF LONDON YARD, ISLE OF DOGS, COUNTY OF MIDDLESEX, ENGLAND.

## CORRUGATED PLATE.

SPECIFICATION forming part of Letters Patent No. 390,941, dated October 9, 1888.

Application filed July 26, 1888. Serial No. 281,098. (No model.) Patented in England November 25, 1887, No. 16,245.

*To all whom it may concern:*

Be it known that I, ROBERT BAILLIE, a citizen of England, residing at London Yard, Isle of Dogs, in the county of Middlesex, England, have invented a new and useful Improvement in Corrugated Plates, (for which I have obtained a Patent in Great Britain, No. 16,245, bearing date November 25, 1887,) of which the following is a specification.

When a corrugated plate has to extend over a considerable span, although the corrugations may give it more than sufficient transverse strength near its supports or bearings, the middle portion of the span is often too weak and the plate is apt to become deflected by its own weight or by such load as it may have to support.

My invention relates to the construction of corrugated plates in such a manner as to give them increased strength to resist transverse strains, especially when they have to extend over considerable spans. For this purpose I make the corrugations of the plate deeper in the middle than at the ends of the plate, preferably by making the ridges rise with a gentle curvature from each end to the middle, while the bottoms of the furrows remain level. Thus the plate when looked at from the side appears as a combined girder with its lower side straight and its upper side curved.

Figures 1 and 2 of the accompanying draw-

ings illustrate plates corrugated in this way, Fig. 1 showing a plate with its corrugations of trapezoidal form, and Fig. 2 showing a plate with curved or undulating corrugations.

The dotted lines A B C, drawn parallel to the bottom line of the furrows from the tops A and C of the end ridges, indicate the increase B D of the depth of the corrugations at the middle. The proportions of the depths as well as the forms of the corrugations may be varied, and the plates instead of being straight on the under side may be curved as for arching, the increased depth of corrugation in the middle being nevertheless maintained.

Having thus described the nature of my invention and the best means I know for carrying the same into practical effect, I claim—

Corrugated plates having their corrugations deeper in the middle than at the ends, substantially as and for the purposes herein set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 12th day of July, A. D. 1888.

ROBERT BAILLIE.

Witnesses:

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