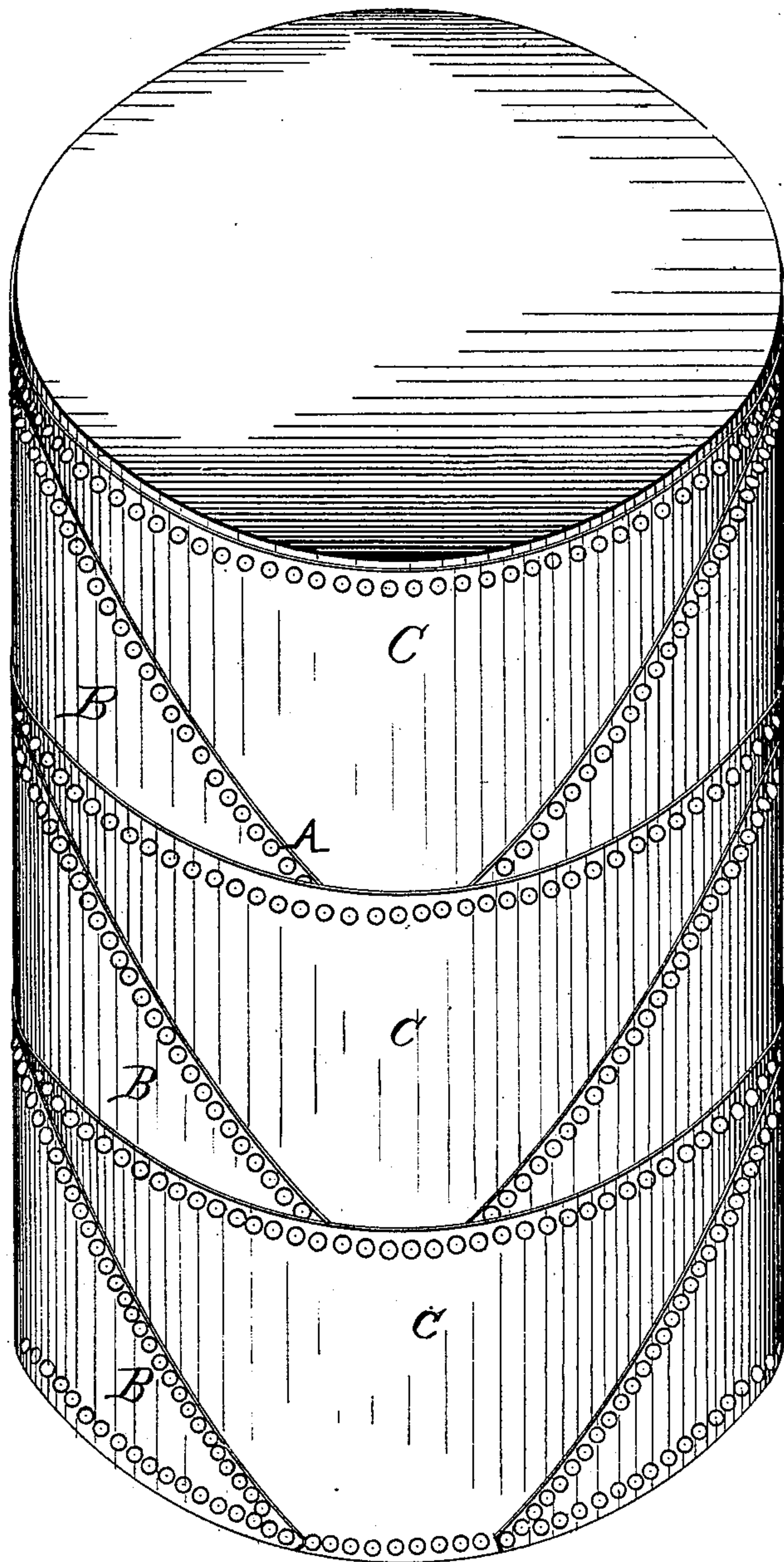


L. SHOOK.  
Steam-Boiler.

No. 202,382.

Patented April 16, 1878.

Fig. 1;



Witnesses;  
J. Walter Bowler  
Chas. C. Gill

Inventor;  
Levi Shook  
By his attys.  
Cox & Cox

# UNITED STATES PATENT OFFICE.

LEVI SHOOK, OF PITTSBURG, PENNSYLVANIA.

## IMPROVEMENT IN STEAM-BOILERS.

Specification forming part of Letters Patent No. **202,382**, dated April 16, 1878; application filed December 12, 1877.

*To all whom it may concern:*

Be it known that I, LEVI SHOOK, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Steam-Boilers, of which the following is a specification, reference being had to the accompanying drawings.

The invention relates to an improvement in steam-boilers; and consists in so arranging the plates thereof that the riveted joints shall not be exposed to the action of the fire.

In the accompanying drawing, which represents a perspective view of the invention, B and C indicate the plates composing the boiler, and are of the contour shown.

The plate B is of sufficient length to almost completely encircle the boiler, and has its ends cut at an acute angle to the horizontal edges of the plate, the line of the angle diverging upward and inward. Thus when the plate is in position its lower corners almost meet, while the remaining portions of its ends are separated, constructing a space in the form of an inverted equilateral or isosceles triangle, according to the width of the plate, which space is completely filled by the similarly-formed plate C, having its ends also cut at an angle corresponding with the ends of the plate B.

The sheets or plates B C are punched and then riveted together by the punching and riveting process heretofore practiced.

The advantage of cutting the plates in the manner hereinbefore described is to strengthen

the boiler, by having the angle of force of the strain upon their riveted ends at an acute angle to the longitudinal plane of its axis.

The purpose of the arrangement of the plates B C is to keep the seams of the boiler from coming in contact with the more intense part of the fire, and thereby preserve them from being burned off, thus dispensing with a defect to which the ordinary steam-boilers are subjected.

I am aware that a steam-boiler composed of plates the edges of which are cut obliquely to the axis of the boiler are old, and I do not, therefore, claim such device broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a steam-boiler, the combination of the plate B with the triangular plate C, arranged substantially as shown and described.

2. The steam-boiler A constructed from the plates B C, the plate B almost completely encircling the boiler, and having its ends cut at an angle, and the plate C being of triangular form, and completely filling the space between the ends of the plate B, substantially as expressed.

In testimony that I claim the foregoing improvement in steam-boilers, as above described, I have hereunto set my hand.

LEVI SHOOK.

Witnesses:

M. F. CASSIDY,  
GEORGE EVANS.