

No. 812,492.

PATENTED FEB. 13, 1906.

C. S. HOOPER.
SUPPORTING LUG FOR BOILERS.
APPLICATION FILED DEC. 31, 1904.

Fig. 1.

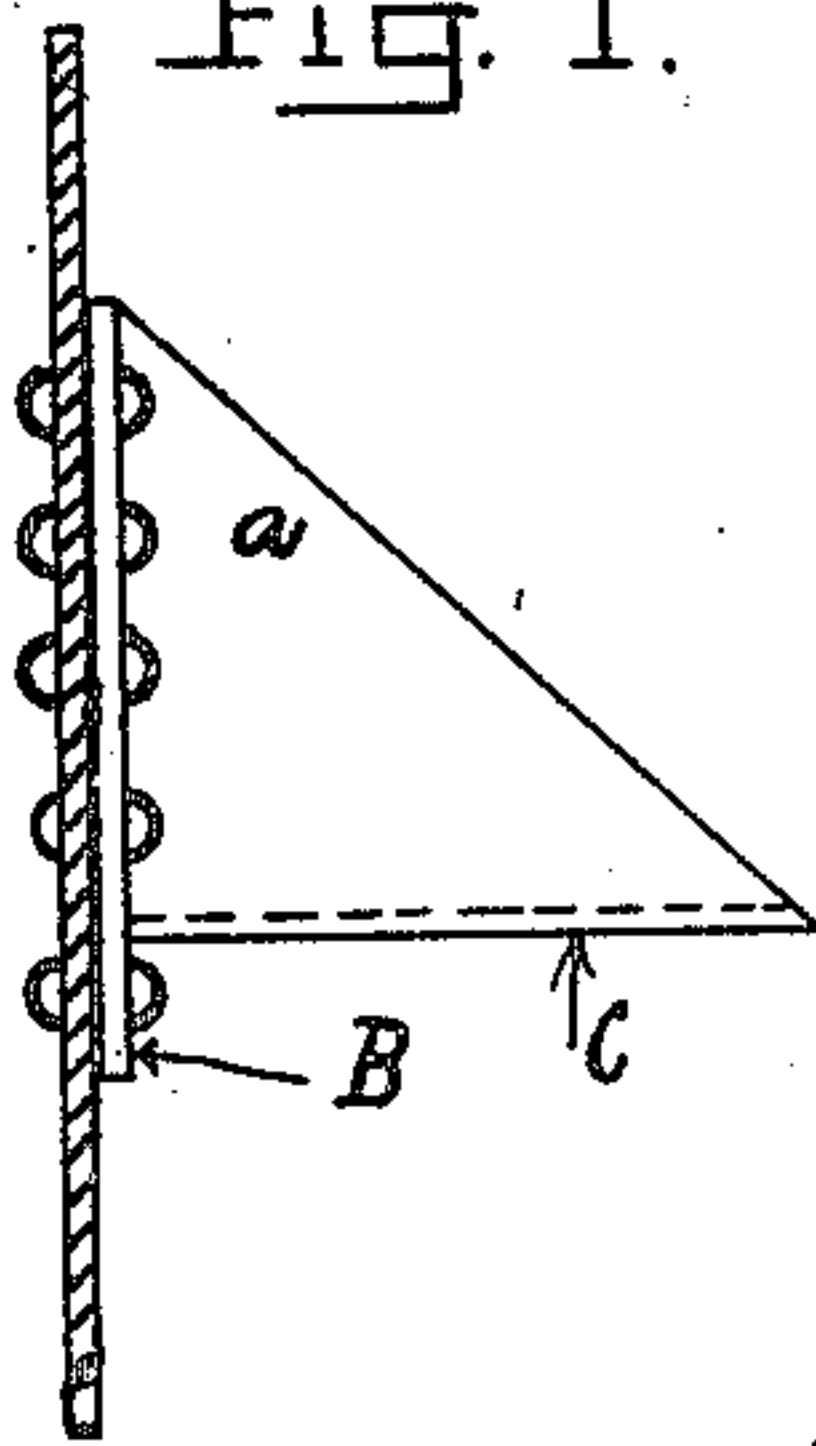


Fig. 2.

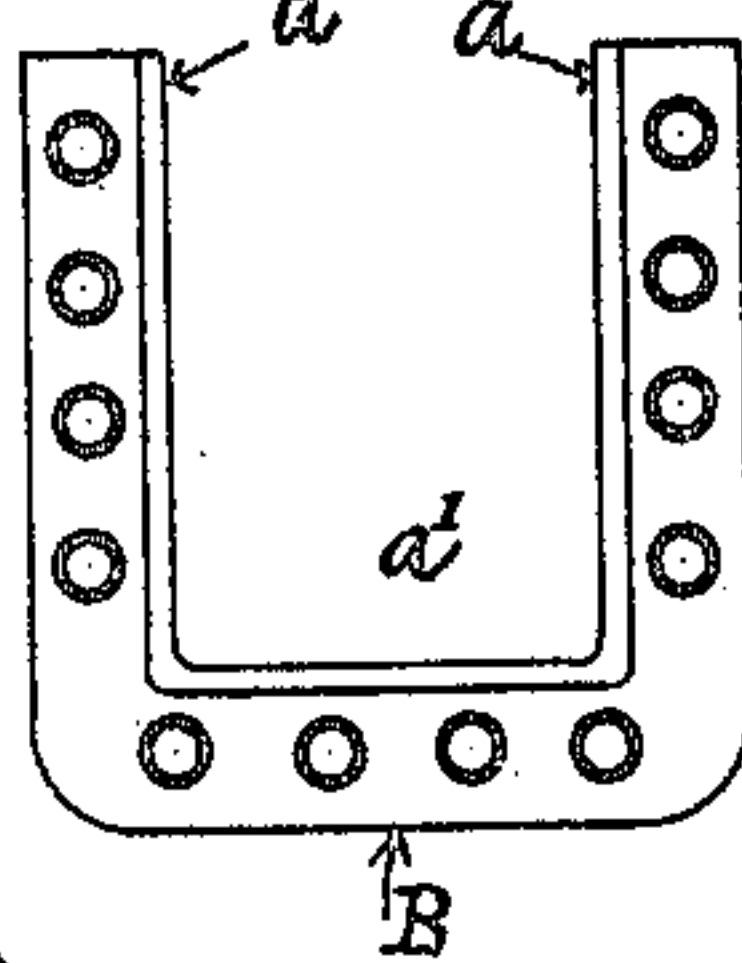


Fig. 3.

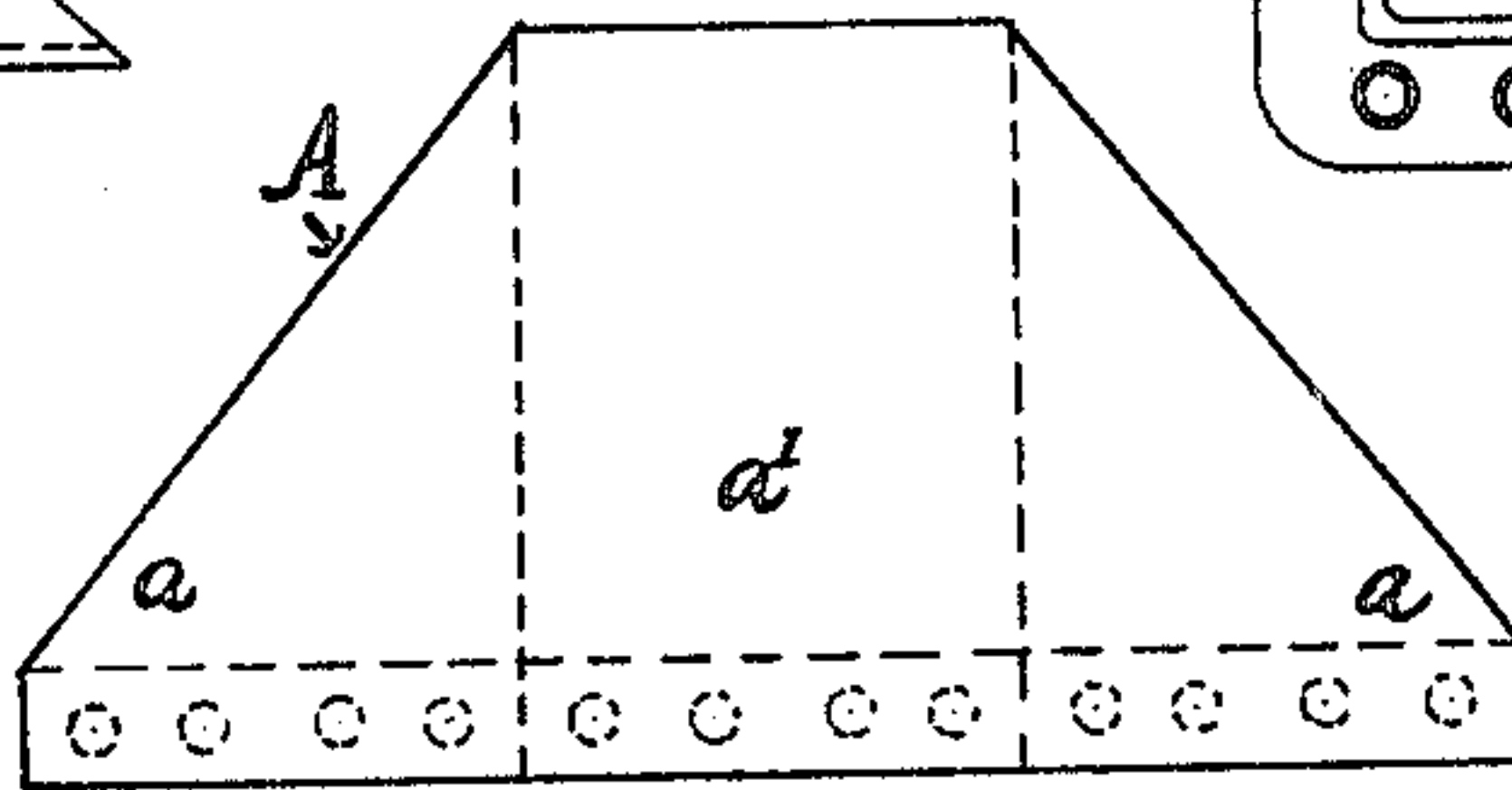


Fig. 4.

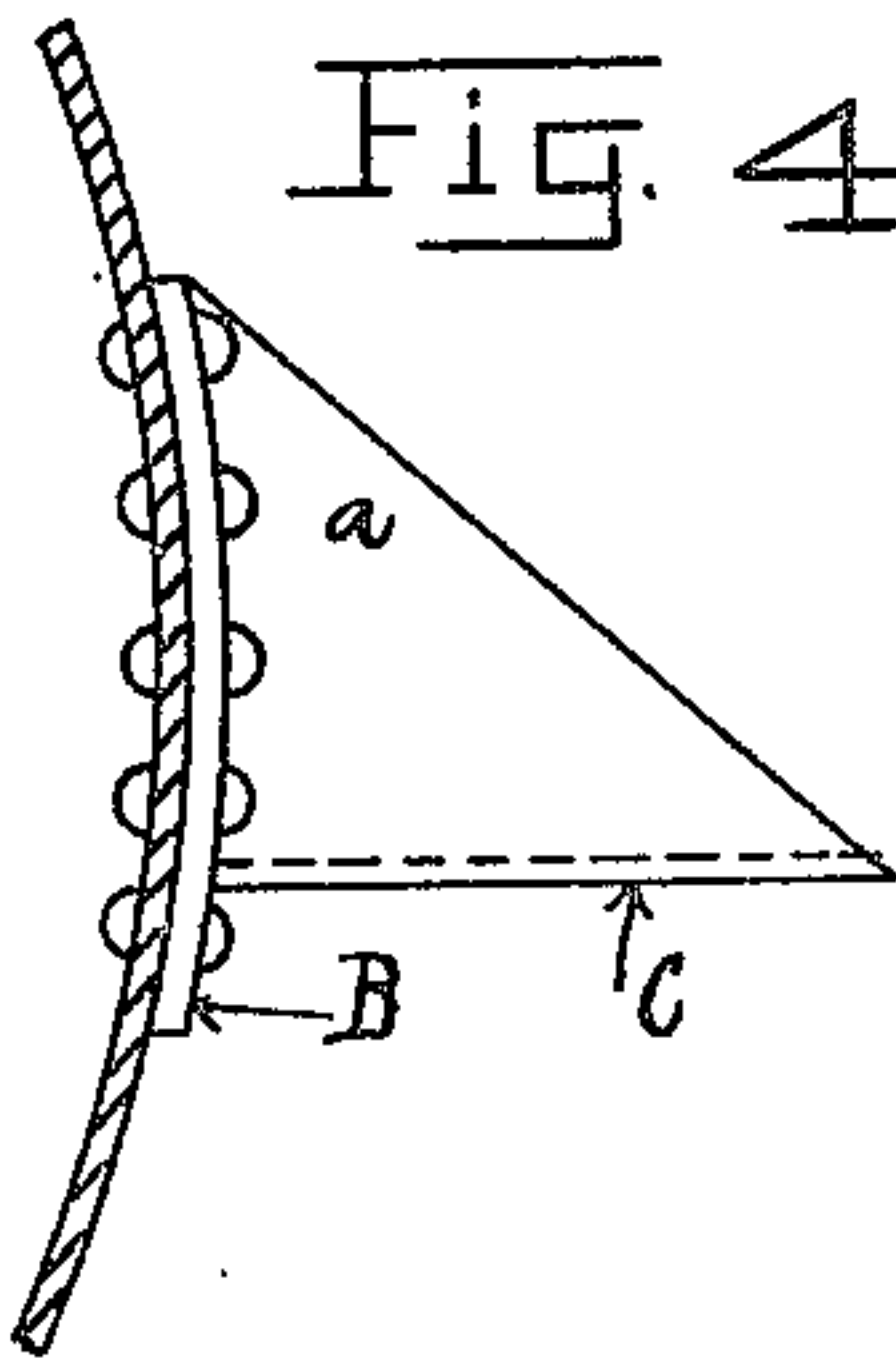


Fig. 5.

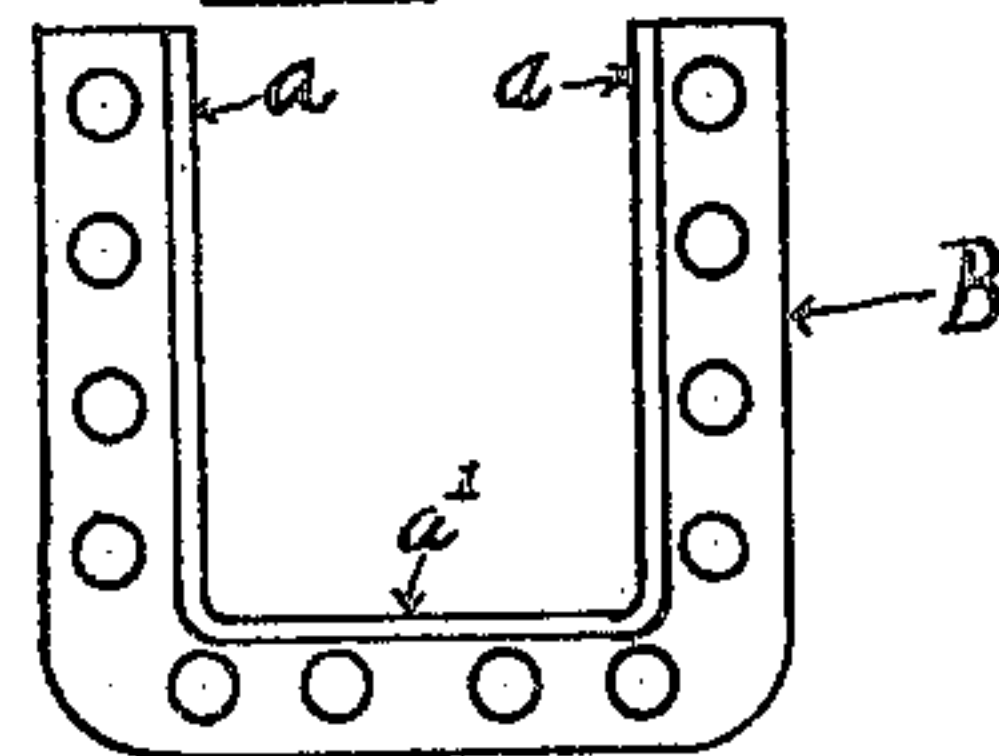


Fig. 6.

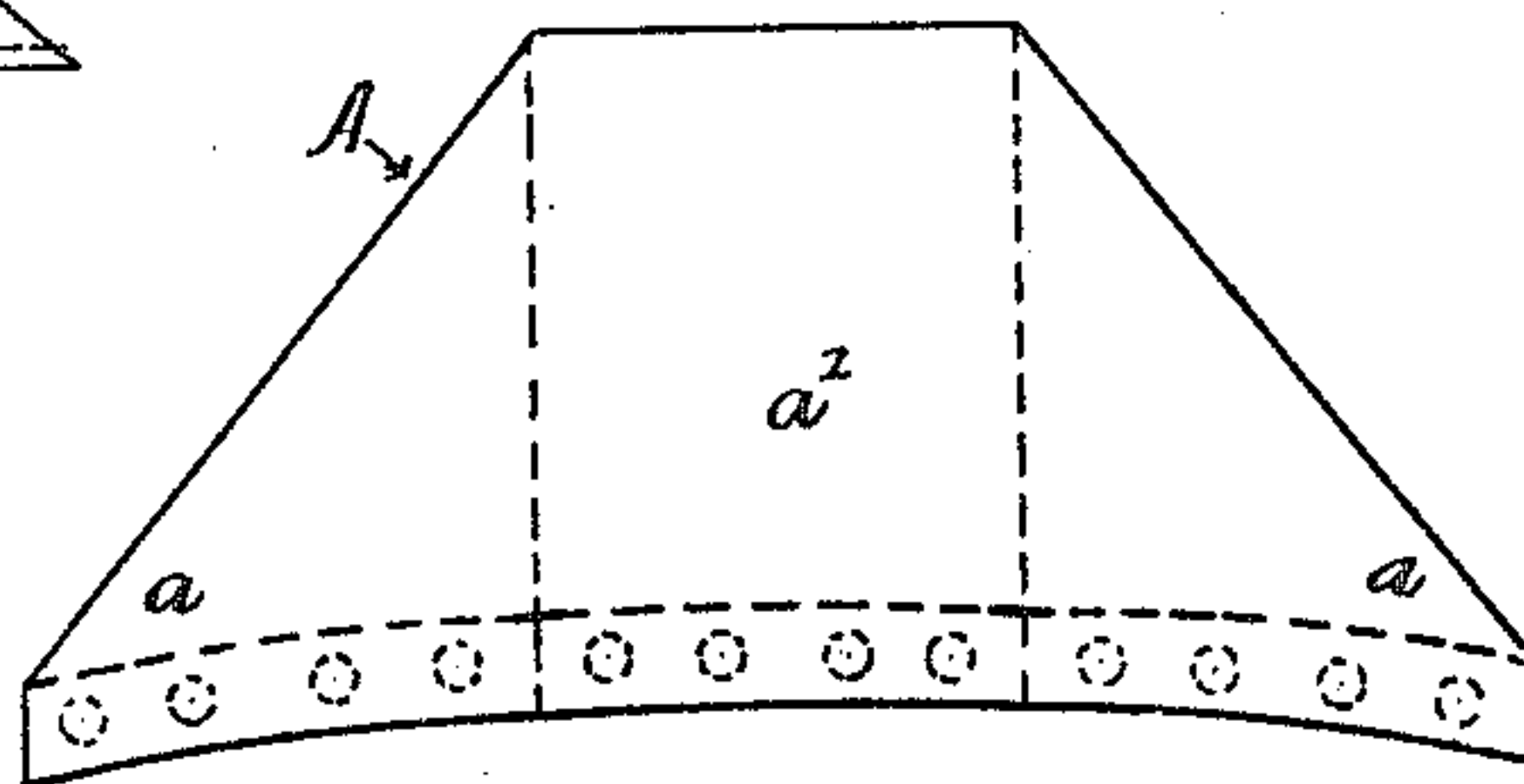


Fig. 7.

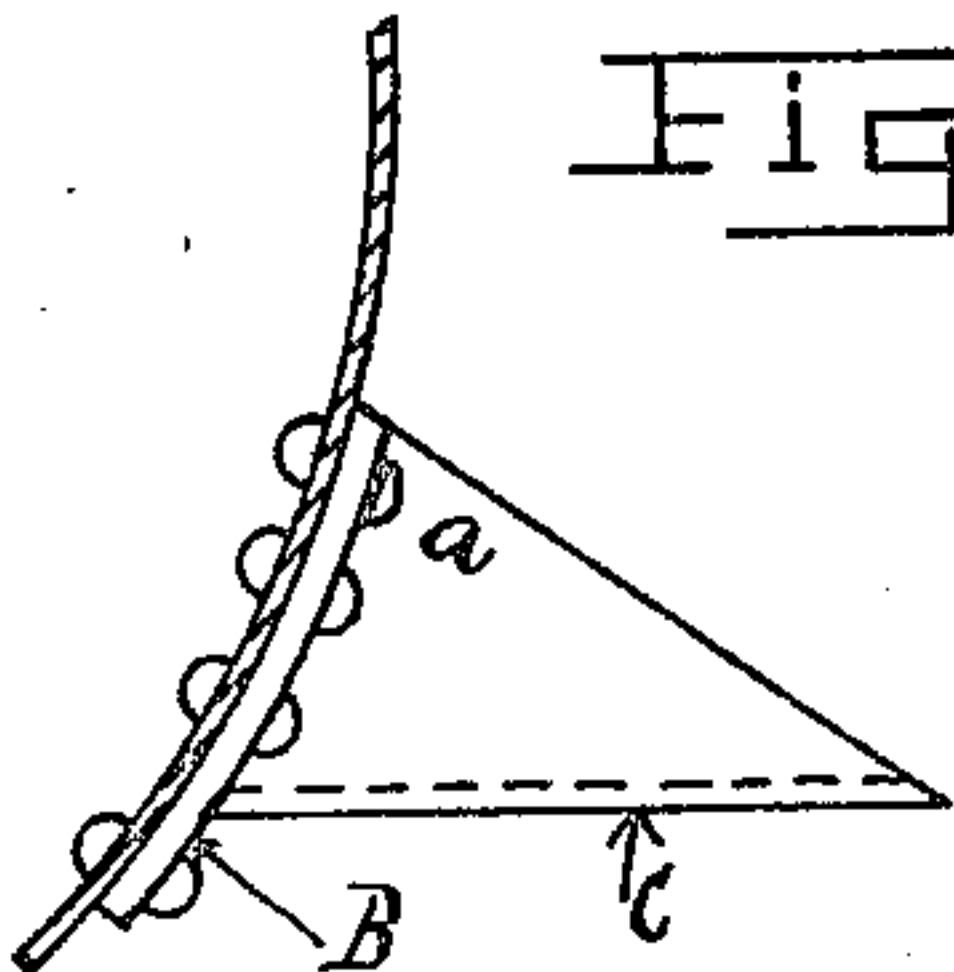


Fig. 8.

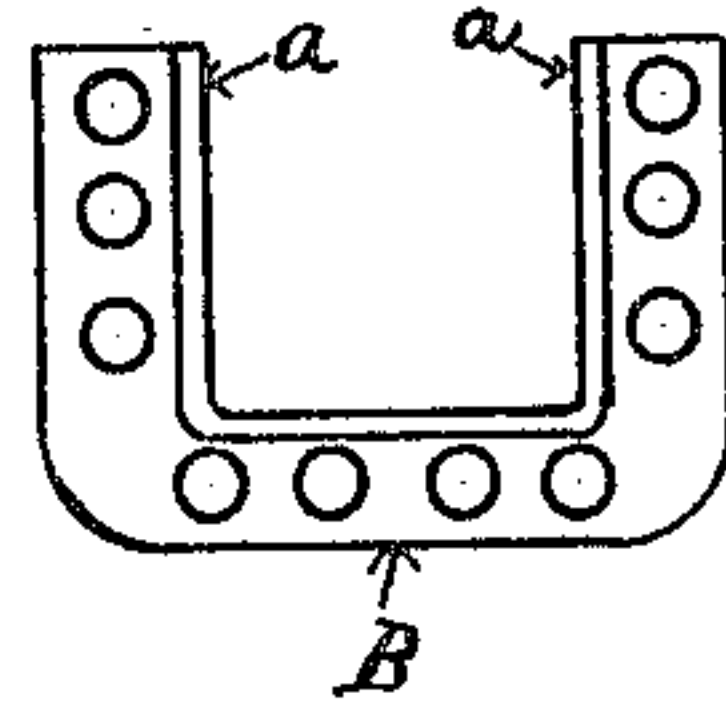
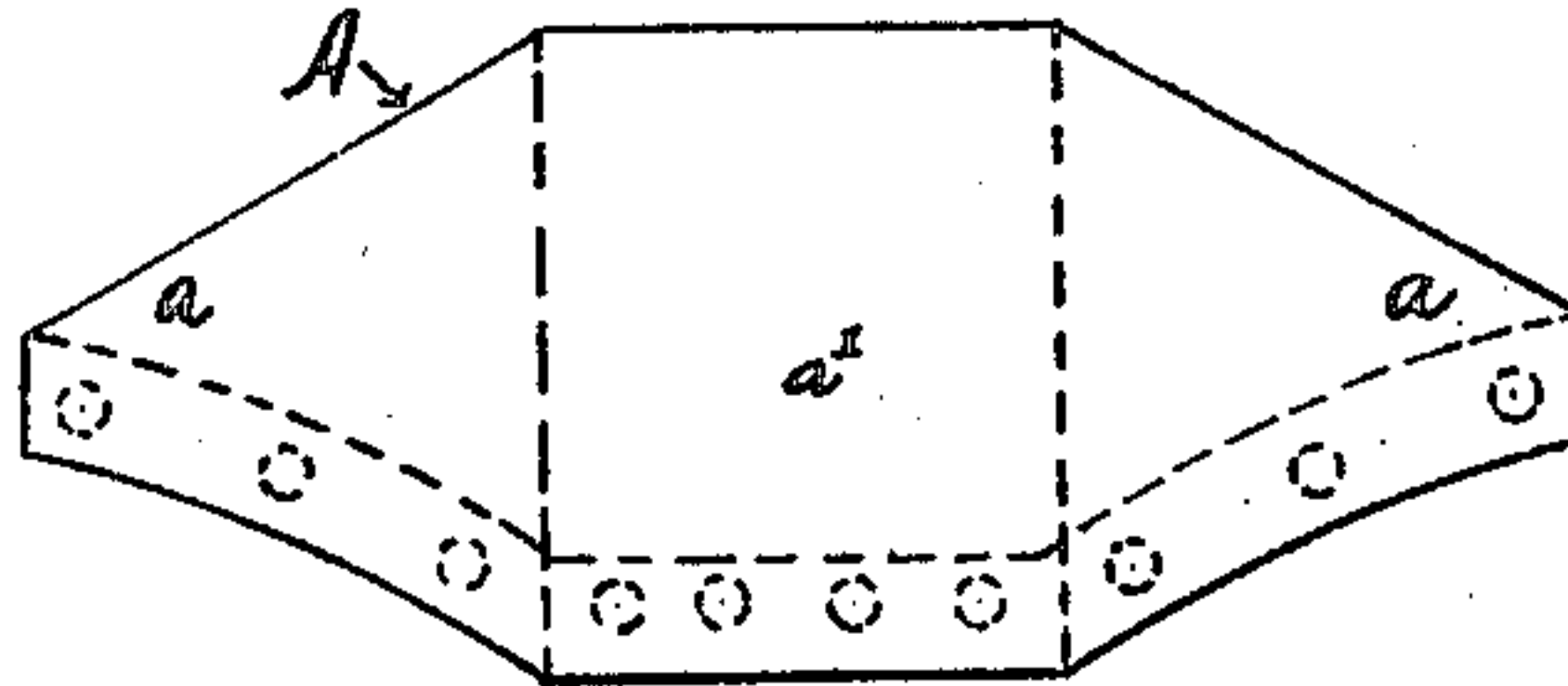


Fig. 9.



Witnesses:
Ralph A. Sturgeon.
Florence Stockert.

Inventor.
Charles S. Hooper.
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UNITED STATES PATENT OFFICE.

CHARLES S. HOOPER, OF ERIE, PENNSYLVANIA.

SUPPORTING-LUG FOR BOILERS.

No. 812,492.

Specification of Letters Patent.

Patented Feb. 13, 1906.

Application filed December 31, 1904. Serial No. 239,151.

To all whom it may concern:

Be it known that I, CHARLES S. HOOPER, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Supporting-Lugs for Boilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention relates to supporting-lugs for steam-boilers and other like structures, and has for its object the construction of a supporting-lug from sheet-metal blanks in such a manner as to get the maximum strength in the side or brace portions of said lugs.

The features of my invention are herein-after set forth and explained, and are illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved supporting-lug secured to the side of the fire-box of a portable boiler. Fig. 2 is an end view of the same. Fig. 3 is a plan view of a sheet-metal blank therefor. Fig. 4 is a side elevation of my improved supporting-lug secured to the side of a horizontal boiler or tank. Fig. 5 is an end view of the same. Fig. 6 is a plan view of a sheet-metal blank for same. Fig. 7 is a side elevation of my improved supporting-lug secured to the side of a horizontal boiler or tank below the center thereof. Fig. 8 is an end view thereof. Fig. 9 is a plan view of the sheet-metal blank therefor.

In forming my improved supporting-lug for use on the side of the fire-box of a portable boiler, as shown in Figs. 1 and 2, I have the blank A therefor cut from sheet metal substantially in the form shown in Fig. 3, and then I bend or press the ends *a a* thereof along the broken lines *x x* until they are substantially parallel to each other and form, together with the middle portion *a'* of the blank, a U-shaped trough-like structure deep at one end and tapering down to the other end. The deep end of this structure is then bent, preferably outwardly, so as to form a

flange B, through which rivet-holes are drilled for securing the lug to the side of the fire-box.

The styles of lugs shown in Figs. 4 and 7 are designed to be secured to the side of a horizontal boiler and are formed from sheet-metal blanks, substantially as shown in Figs. 6 and 9, and are bent or pressed U-shaped, as above described, and the deep end thereof provided with a flange, which is formed to fit the side of a horizontal boiler at the point desired.

From the foregoing description it will be observed that I am thus enabled to construct a supporting-lug of pressed metal, which lug has a flat bearing-surface C to rest upon the supporting-wall and strongly-braced sides *a a*, extending upward therefrom with a flanged face B on one end thereof so formed as to fit the surface to which the lug is to be secured, said flange extending across the bottom and up the sides of the lug. In this manner I am enabled to secure a maximum strength in a supporting-lug by the use of a minimum amount of metal, the weight of the metal being so disposed in the bearing-surface, brace-webs, and flanges of the lug that I am enabled to construct a very strong lug from a minimum weight of metal.

I am aware that boiler-supporting lugs have been heretofore made from metal plates pressed into shape; but the form of my lug and the disposition of the metal therein is widely different from that of the pressed steel lugs heretofore made.

Therefore, having thus fully described my invention, so as to enable others skilled in the art to construct and utilize the same, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A boiler-lug constructed from a sheet of plate metal, bent into U-shaped form so as to provide a horizontal member, and vertical webs at the sides thereof, and a flange at one end of said U-shaped structure adapted to be riveted to a boiler, substantially as described.

2. A boiler-lug constructed from a sheet of plate metal, so bent as to provide a horizontal member having triangular webs at the sides thereof, an outwardly-projecting flange on said horizontal member and said vertical

triangular webs at the larger end of the lug adapted to rest against and be riveted to the boiler; substantially as described.

3. A boiler-lug having a horizontal member, brace-webs at the sides thereof, and a radial flange around one end of said horizontal member and brace-webs, said flange being formed to fit the contour of the surface to which the lug is to be secured, all formed

from one piece of sheet metal, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES S. HOOPER.

Witnesses:

RALPH H. STURGEON,
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