

(No Model.)

2 Sheets—Sheet 1.

W. KENT.

METHOD OF MAKING CONNECTING BOXES FOR WATER TUBE BOILERS.

No. 330,129.

Patented Nov. 10, 1885.

Fig 1

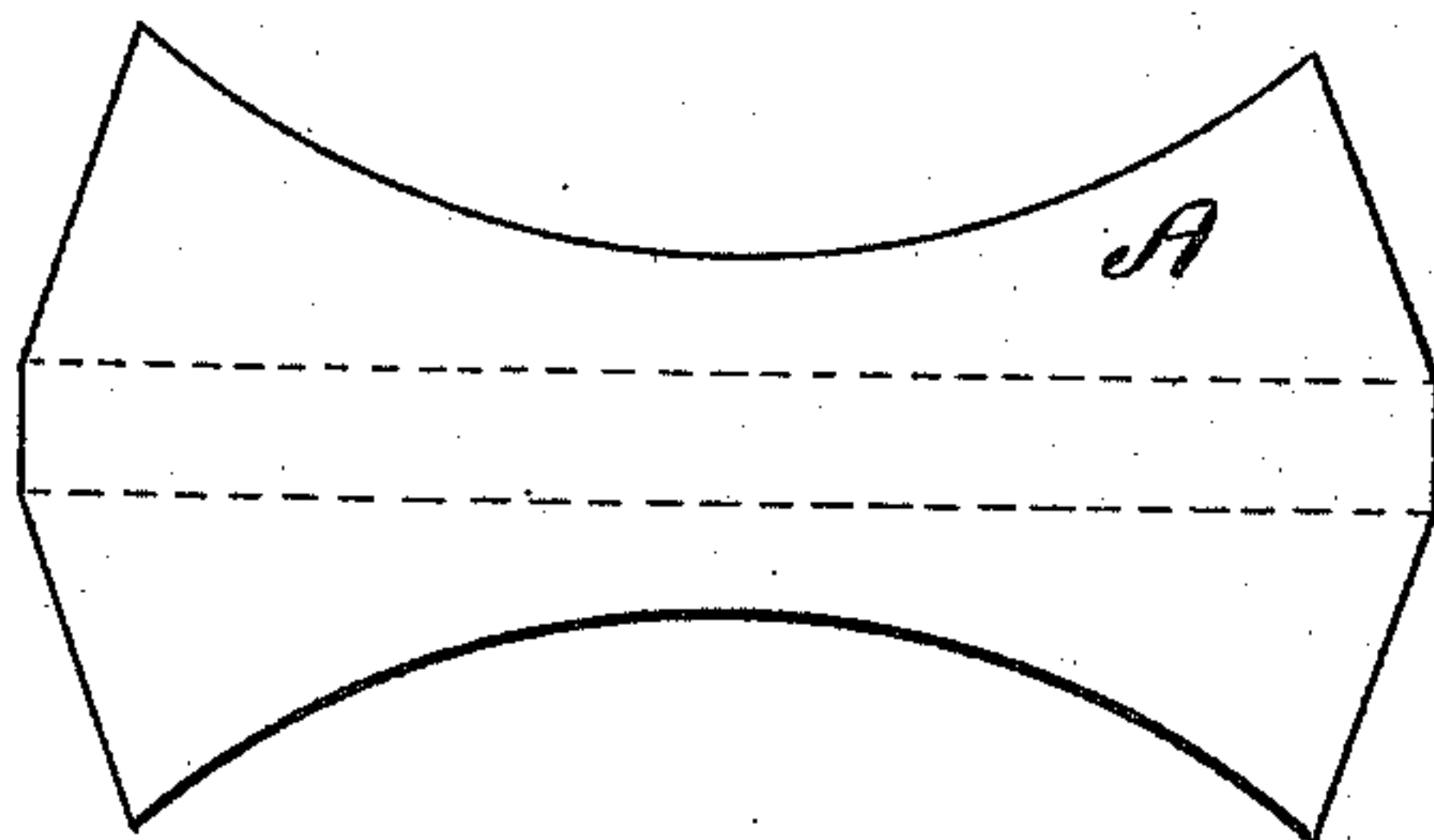


Fig 2

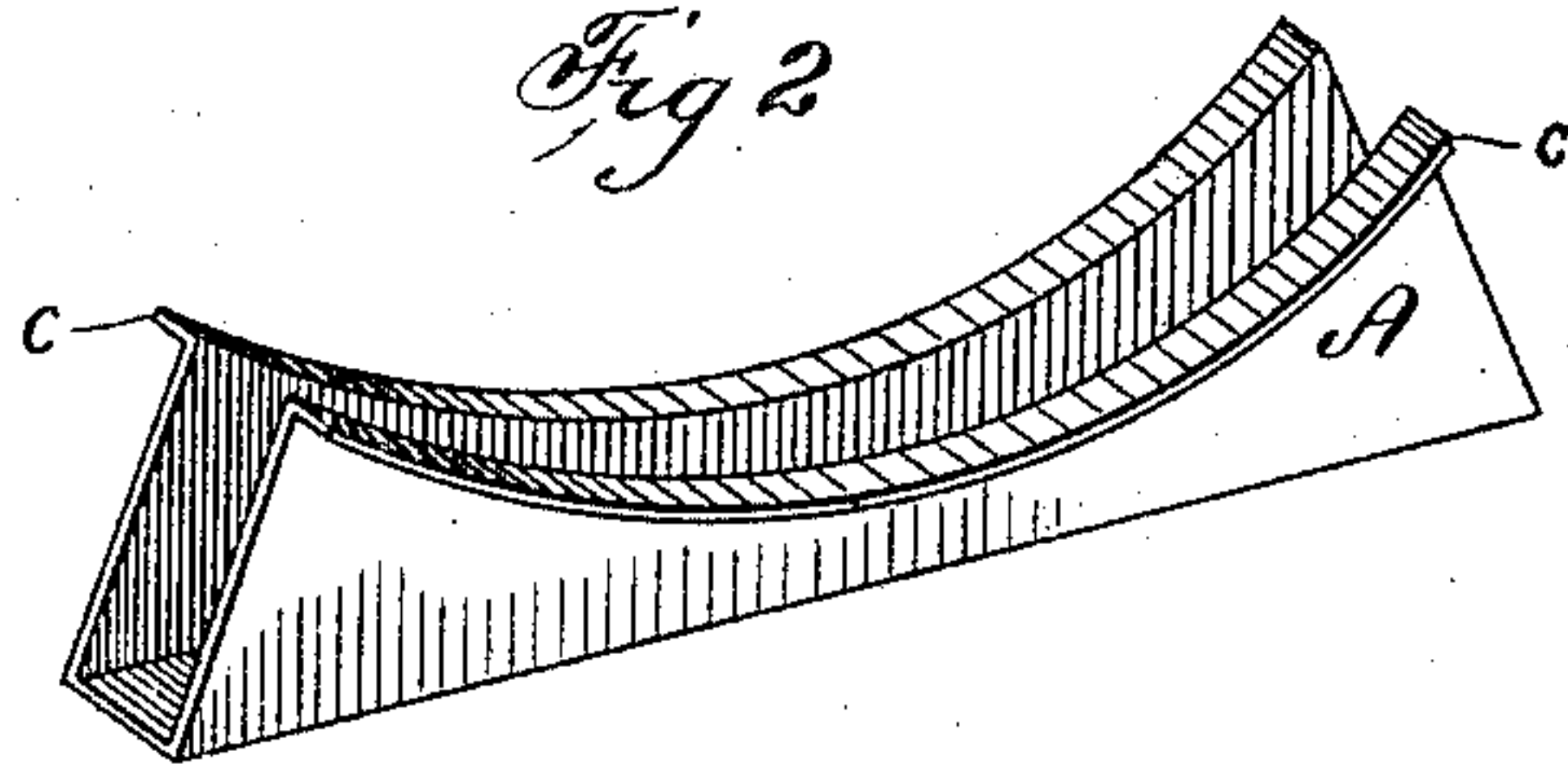


Fig 3

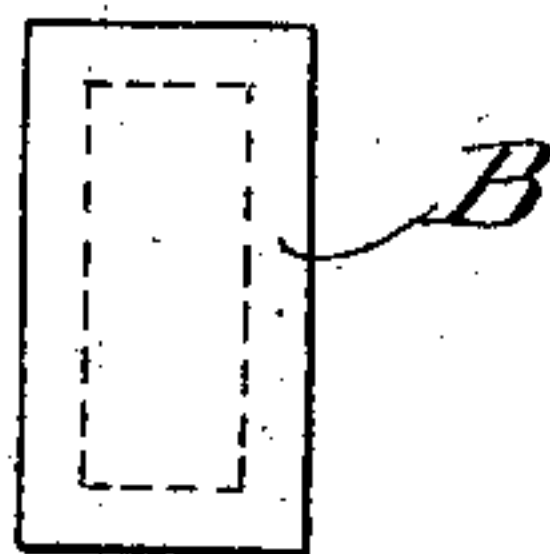
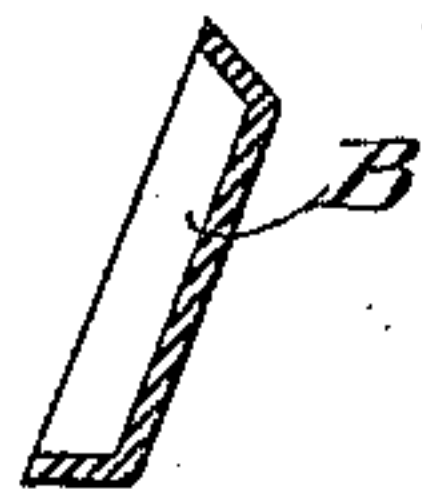


Fig 4



Witnesses

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Inventor
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(No Model.)

2 Sheets—Sheet 2.

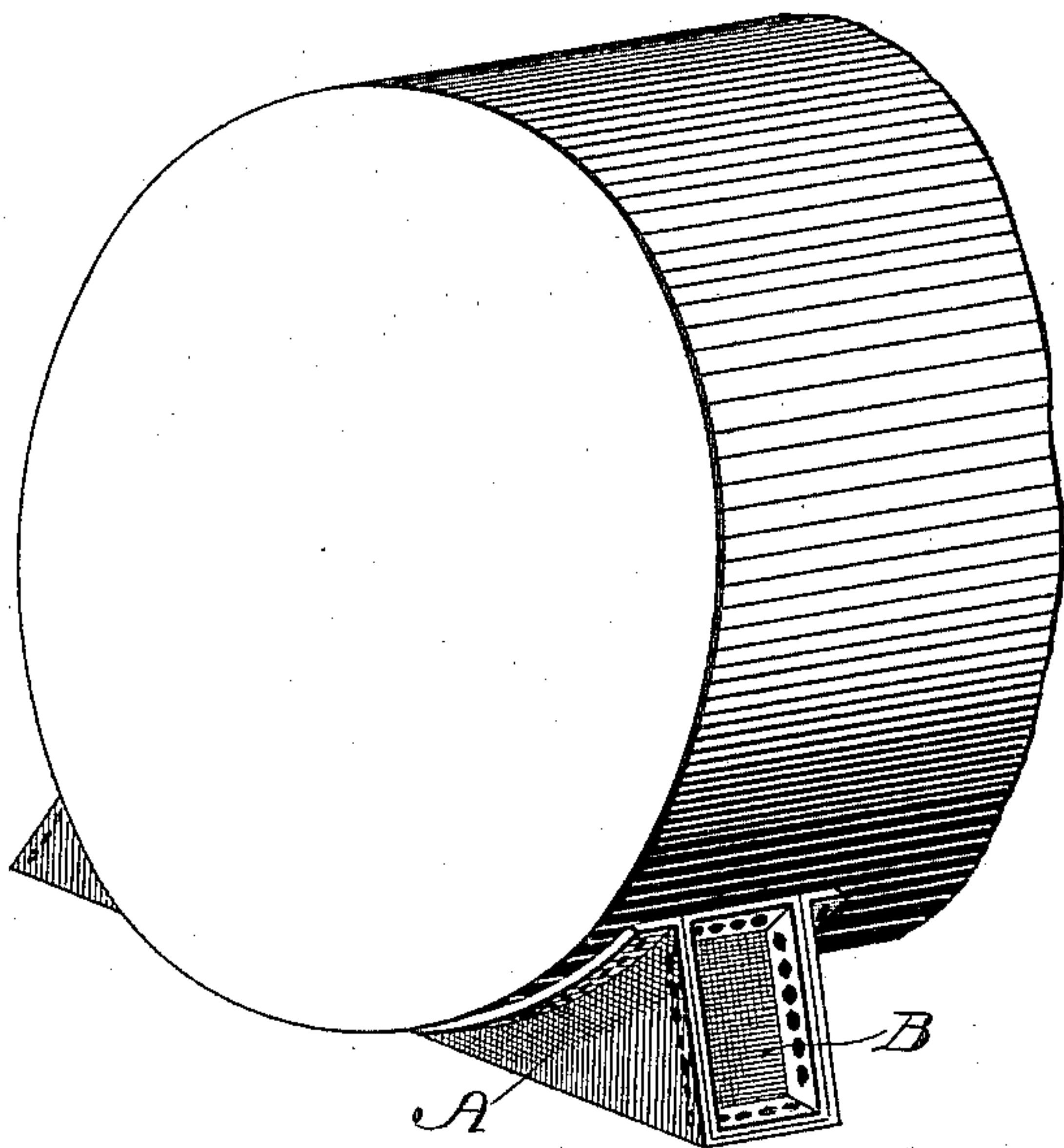
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Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM KENT, OF JERSEY CITY, NEW JERSEY.

METHOD OF MAKING CONNECTING-BOXES FOR WATER-TUBE BOILERS.

SPECIFICATION forming part of Letters Patent No. 330,129, dated November 10, 1885.

Application filed April 22, 1885. Serial No. 163,093. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM KENT, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Processes of Making Connecting-Boxes for Water-Tube 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.

My invention relates to certain novel and useful improvements in the method of making connecting-boxes for water-tube boilers, and has for its object to greatly simplify and facilitate the making of boxes of this description; and with these ends in view my invention consists in the details of construction hereinafter fully set forth, and then specifically designated by the claim.

In order that those skilled in the art to which my invention appertains may more fully understand my improved method, I will proceed to describe the same in detail, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 shows the sheet-metal blank from which the sides and bottom of the box are formed; Fig. 2, a perspective of the box after it has been bent into shape. Fig. 3 shows the blank from which the ends are formed; Fig. 4, a vertical section of one of the ends after it has been bent into shape; and Fig. 5 is a perspective showing the ends and sides riveted together and to the boiler.

Similar letters denote like parts in the several figures of the drawings.

In water-tube boilers it has been found extremely difficult to connect the water-legs or headers to the drum without the interposition of connecting-boxes of some description, and

without the use of the latter it is impossible to use headers composed of more than one compartment, such as large upright tubes.

By my improved method I provide an exceedingly simple, cheap, and convenient device for connecting headers with the drum regardless of their number or construction, while at the same time they act as supports for said drum.

I first strike a blank of the shape shown at Fig. 1. Then by means of suitable dies I form the sides A and bottom B, the former being at right angles to the latter. A flange, C, extending along the upper edge of the sides, is made by dies, for the purpose presently explained.

The ends are first blanked out, as shown at Fig. 3, and then by dies they are cup-shaped, as shown at Fig. 4, so as to fit between the sides at the ends thereof. The ends are then riveted to the bottom and sides of the box, and the completed box is riveted to the boiler, as clearly shown at Fig. 5.

The flange affords a support for the boiler, as well as a sufficiency of stock for the rivets to pass through into the boiler.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The method of making connecting-boxes for water-tube boilers, the same consisting in bending the sides and bottom into the desired form from one piece of metal and riveting said sides, bottom, and ends together and to the drum, as shown and specified.

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

WILLIAM KENT.

Witnesses:

S. S. WILLIAMSON,
H. T. SHELTON, Jr.