

F. B. STEVENS.  
BOILER COVERING.

No. 185,460.

Patented Dec. 19, 1876.

Fig. 1.

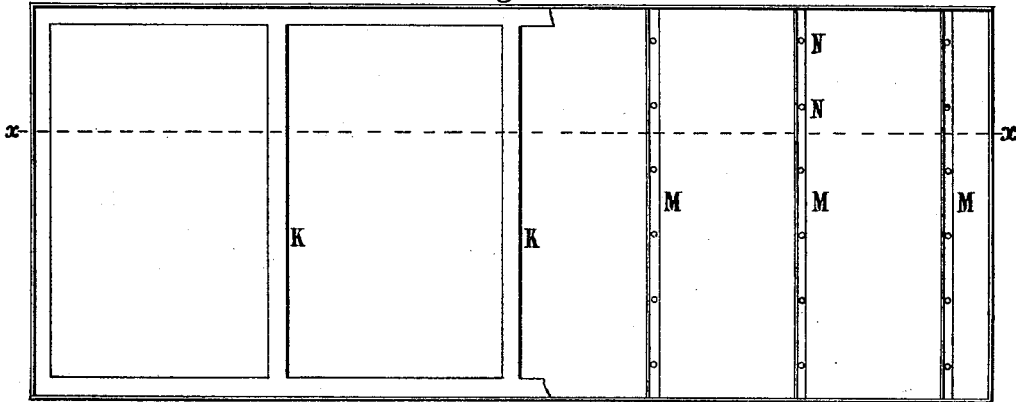


Fig. 3.

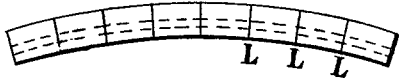


Fig. 2.

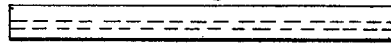
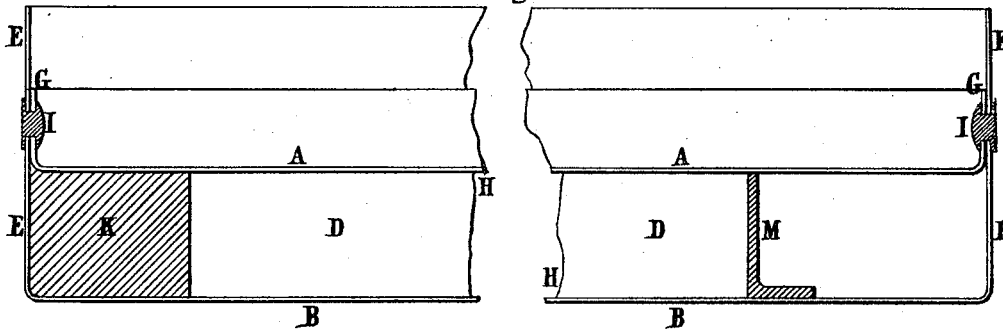


Fig. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANCIS B. STEVENS, OF HOBOKEN, NEW JERSEY.

## IMPROVEMENT IN BOILER-COVERINGS.

Specification forming part of Letters Patent No. 185,460, dated December 19, 1876; application filed January 21, 1876.

*To all whom it may concern:*

Be it known that I, FRANCIS B. STEVENS, of the city of Hoboken and State of New Jersey, have invented an Improvement in Boiler-Coverings, of which the following is a specification:

My invention consists in an improvement in the description of boiler-covering for which Letters Patent of the United States were granted me November 2, 1875, No. 169,492.

Figure 1 shows a horizontal view of a hollow section of metal boiler-covering, with the sheet of metal next to the boiler removed. Fig. 2 shows an end view of Fig. 1. Fig. 3 shows an end view of Fig. 1, if bent to the curvature of a boiler seven feet in diameter. Fig. 4 shows a cross-section taken through the line X X of Fig. 1.

The length of this cross-section is not shown, the two ends being divided by the broken line H H.

I construct the hollow sections of metal thin enough to be bent to a right angle without injury, for which purpose I have found sheet-iron of No. 26, wire gage, and also galvanized sheet-iron of the same thickness, to be thin enough; and I form the flanges E E E E by bending all the four edges of the sheet B. These flanges E E are only shown in the drawing in Fig. 4, on the ends of the plate, the two flanges on the side of the plate being formed in a similar manner. I also form flanges G G G G on all the four edges of the inner sheet A, and I fasten the sheets A and B together by the rivets I I, through the

flanges E and G. I make the flanges G only sufficiently long to hold the rivets I, and I make the flanges E project beyond the flanges G, as shown, so that they can readily be cut by hand-shears, and fitted over the irregularities of boiler-surfaces, such as rivet-heads and laps of the boiler-plates.

When the hollow sections of metal are to be made to fit over a circular boiler I slit, by shears, the circular flanges E, as shown at L L on Fig. 3, to allow these flanges to bend to the curvature; and I also slit the flanges G G in the same manner.

To strengthen and stiffen the hollow sections, as above described, and to prevent the plates A and B from being forced together, I put ribs of wood K or ribs of iron M inside of the hollow spaces D. I secure these wooden ribs K to the plates A and B by nails, and I secure the iron ribs M to the plate B by the rivets N.

I claim as my invention—

1. The combination of a boiler-covering, made of hollow sections, formed by the flanges G bent on the inner metal plate A, and the flanges E bent on the outer metal plate B, and fastened together through said flanges.

2. The combination of a boiler-covering made of hollow sections, and stiffened by the ribs K and M, placed in the hollow space D between the metal plates A and B.

FRANCIS B. STEVENS.

Witnesses:

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