

(No Model.)

T. C. BEST.
BOILER LUG.

No. 569,164.

Patented Oct. 13, 1896.

Fig. 1.

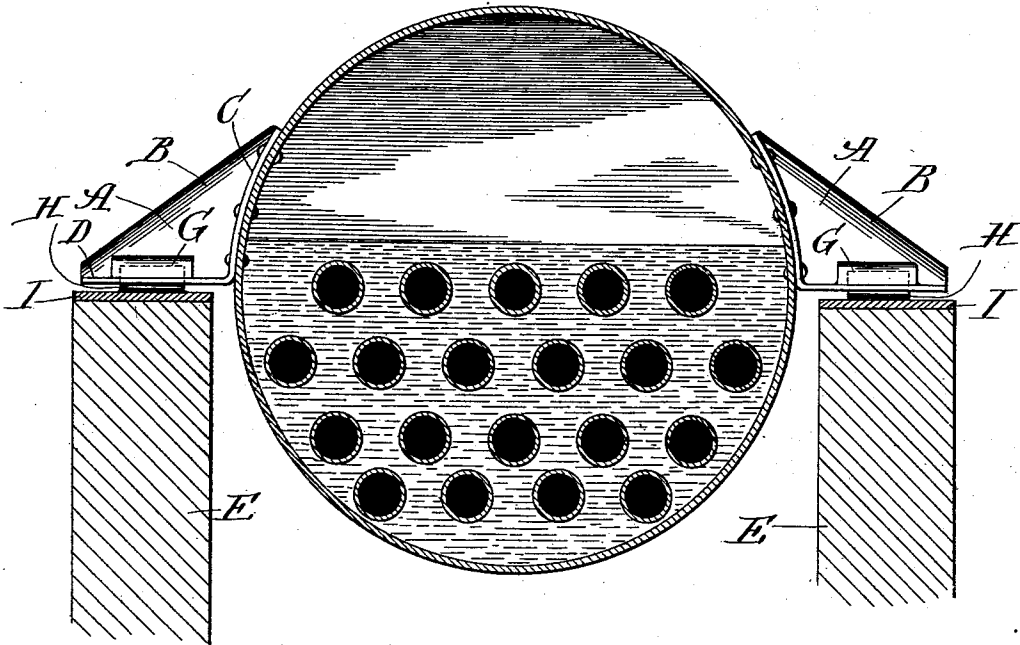


Fig. 2.

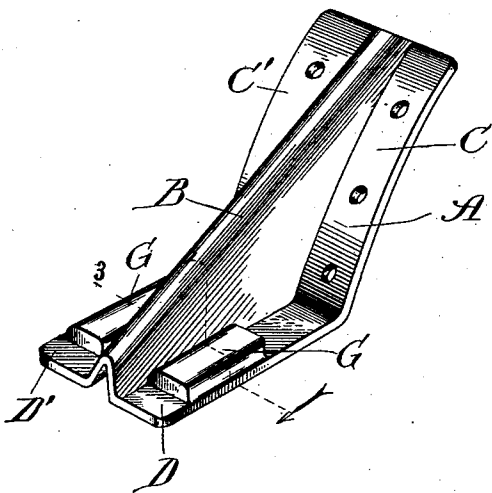


Fig. 3.

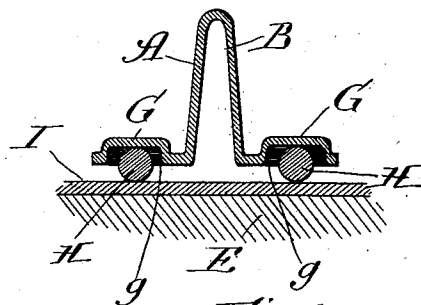
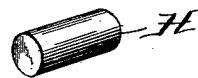


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS C. BEST, OF CHICAGO, ILLINOIS.

BOILER-LUG.

SPECIFICATION forming part of Letters Patent No. 569,164, dated October 13, 1896.

Application filed May 25, 1894. Serial No. 512,392. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. BEST, of Chicago, Illinois, have invented certain new and useful Improvements in Boiler-Lugs, of which the following is a specification.

My invention relates particularly to the means used for supporting the boiler upon the foundation or supporting walls, and has for its object the providing of a simple, economical, and efficient boiler-lug; and the invention consists in the features and combinations hereinafter described and claimed.

In the drawings, Figure 1 is a transverse section of a tubular boiler with my improved lugs attached to and supporting the same; Fig. 2, a perspective view of one of the boiler-lugs; Fig. 3, a transverse section of a boiler-lug, taken on line 3 of Fig. 2; and Fig. 4 a perspective view of one of the rolls upon which the lugs rest and are moved.

In the boilers now in use the majority of lugs used for supporting them are formed or made of castings, particularly cast-iron, and in order to sustain the weight of the boiler and withstand the strain incident thereto they have to be made very heavy. The objection to these lugs, in addition to their excessive weight, is that during the riveting of the lugs to the boiler they are liable to break, owing to the brittleness of the cast-iron, which is also liable to rupture and fracture during the heating and cooling or expansion and contraction of the material from which they are formed. To remedy these objections, as well as to provide a bracket of the minimum weight to support the boiler and that will last an indefinite length of time, is the principal object of my invention.

In making my improved boiler-lug A, I take a piece of flat metal, preferably wrought iron or steel, which is very ductile under the hammer, and press it together to form the strengthening-rib B, then bend at substantially right angles to such strengthening-rib the flanges C C', which are attached to the boiler, and, in ordinary instances, the portion D D', which is a continuation of the flanges and rests upon the brickwork to support the entire structure. The lug may be

formed in this manner in one continuous operation, although two or more operations may be more economical.

In ordinary cases the lug rests principally and supports the weight of the boiler upon the foundation-walls E, as shown in Fig. 1, but owing to the expansion or contraction of the boiler, due to extreme changes of temperature, the lugs change their position slightly upon the wall and are liable to crack or rupture the walls or loosen the rivets by which they are secured to the boiler. To obviate this disadvantage, I press a portion of the flanges of the lug, as at G, upwardly to form recesses g, in which are placed parallel cylindrical rolls H, to support the boiler-lugs with their weight upon the walls. To form an easy track for these rolls to move on and save the brickwork, I prefer to arrange sheet-iron plates I on the brickwork immediately under the rolls, thus permitting the same to move easily thereon.

While I have shown and described my invention as embodied in certain precise forms, I do not desire to be limited thereto unduly any more than is pointed out in the claims. On the contrary, I contemplate all proper changes in form, construction, and arrangement, the omission of parts and the substitution of equivalents, as circumstances may suggest or necessity render expedient.

I claim—

1. A boiler-lug formed of one integral piece of ductile metal and having its center strengthening-rib U-shaped in cross-section, substantially as described.

2. A boiler-lug formed of one integral piece of wrought iron or steel provided with a center strengthening-rib, folded or pressed back upon itself to form substantially a U shape in cross-section, and a supporting-flange on each side of the rib, substantially as described.

3. A boiler-lug provided with a center strengthening-rib U-shaped in cross-section, and roll-recesses formed of one integral piece of wrought-iron, substantially as described.

4. A boiler-lug having a center strengthening-rib U-shaped in cross-section, supporting-

flanges at an angle thereto provided with roll-recesses; the whole composed of one integral piece of wrought-iron, substantially as described.

- 5 5. In combination with a boiler, a metal supporting-lug for the boiler having a center strengthening-rib U-shaped in cross-section,

and rolls upon which the lug is supported and moved, substantially as described.

THOMAS C. BEST.

Witnesses:

THOMAS F. SHERIDAN,
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