No. 617,524. Patented Jan. 10, 1899.

G. H. DRAKE.

SUPPORTING LUG FOR BOILERS.

(Application filed Oct. 10, 1898.)

(No Model.)

Fig. 1.

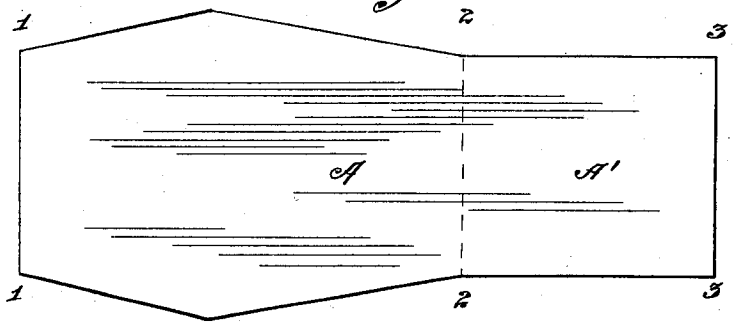


Fig. 2.

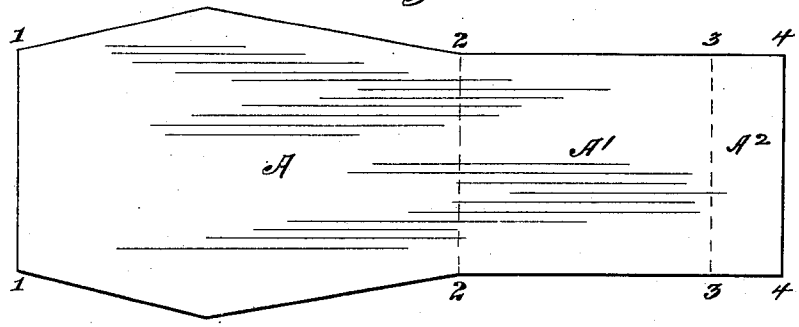


Fig. 3.

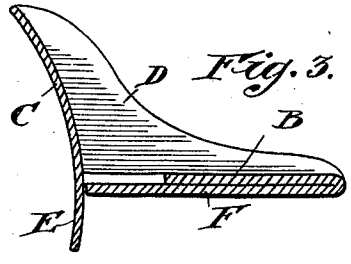


Fig. 5.

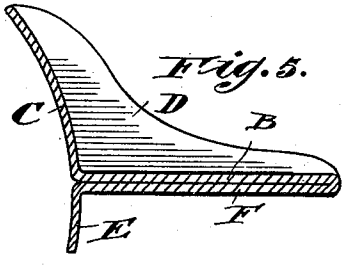


Fig. 4.

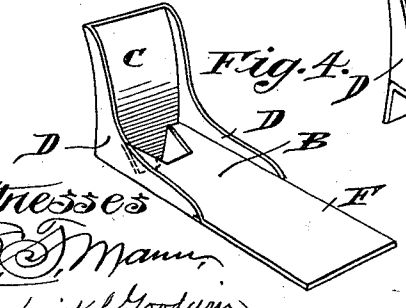
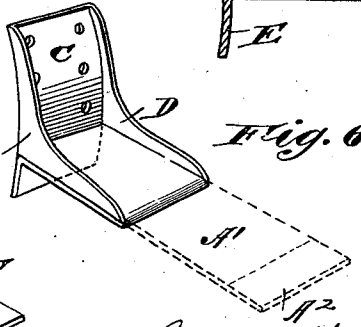


Fig. 6.



Witnesses
F. T. Mann,
Frederick P. Goodwin

Inventor,
George Henry Drake,
By Offield, Towler & Linthicum.
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE HENRY DRAKE, OF OMAHA, NEBRASKA, ASSIGNOR OF ONE-HALF TO ALFRED M. CASTLE, OF CHICAGO, ILLINOIS.

SUPPORTING-LUG FOR BOILERS.

SPECIFICATION forming part of Letters Patent No. 617,524, dated January 10, 1899.

Application filed October 10, 1898. Serial No. 693,149. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY DRAKE, of Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Supporting-Lugs for Boilers, of which the following is a specification.

This invention relates to supporting-lugs for boilers and is in the nature of an improvement upon the invention set forth in Letters Patent No. 491,091, granted February 7, 1893, to me as assignor to Alfred M. Castle and William J. Wickes. In said Letters Patent I have shown, described, and claimed a boiler-lug constructed from a sheet or plate of metal so bent as to provide an upright and a horizontal member and marginal ribs or flanges connecting said members. I have also set forth and claimed in said prior Letters Patent certain structural features whereby a lug of this description may be strengthened for the purpose of adapting it to better resist the weight of heavy boilers. To this end I provided the horizontal portion of the lug with corrugations to increase its strength, and I also formed the upright portion, which fits against the boiler, with a downward extension below the horizontal portion.

My present invention has for its objects to provide an improved means of strengthening the horizontal portion and of providing the downward extension of the upright portion; and to these ends my present invention consists in certain novel features, which I will now proceed to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a blank from which my improved lug is formed. Fig. 2 is a similar view of a modified form of blank. Fig. 3 is a longitudinal sectional view of a lug formed from the blank shown in Fig. 1. Fig. 4 is a perspective view of the lug shown in Fig. 3 in a partly-completed condition. Fig. 5 is a longitudinal sectional view of a lug formed from the blank shown in Fig. 2; and Fig. 6 is a perspective view of the same, shown in full lines in a completed condition and in dotted lines in a partly-completed condition.

In constructing my improved lug I employ a blank A, the body portion of which from the line 1 1 to the line 2 2 is substantially identical with the blank shown in my former patent, being wider at its middle than at its ends to form the marginal strengthening ribs or flanges. This body portion is provided with an extension A′ at one end, extending from the line 2 2 to the line 3 3, said extension being at least equal in length to that portion of the body of the blank which forms the horizontal member of the lug.

The blank shown in Fig. 1 is formed up in the manner set forth in my prior Letters Patent hereinbefore referred to and preferably by the methods set forth in Letters Patent No. 494,370, granted March 28, 1893, to me as assignor to said Wickes and Castle. The lug thus formed comprises a horizontal member B, which is adapted to rest upon the masonry which supports the boiler, an upright member C, preferably curved to fit the boiler and adapted to be secured to the same, and lateral strengthening ribs or flanges D. The horizontal member may be slit and a portion thereof turned down, as shown at E, to provide a depending flange or extension of the upright member in the manner set forth in said prior Letters Patent. The extension A′ of the body of the blank is folded under, so as to lie parallel with the horizontal member B thereof, as indicated at F in Fig. 3, and will rest against and strengthen said horizontal member, particularly at the point where it has been cut away, and will better adapt it to resist the strain of the weight of the boiler. Said part F also strengthens the extension or flange E by abutting against the back of the same and preventing its yielding away from the boiler.

In the form of blank shown in Fig. 2 in addition to the body A and extension A′ of said body there is also provided an additional extension A^2, lying beyond the extension A′ and extending to the line 4 4. With the blank thus constructed it is not necessary to slit the body in order to form the lug E, as the extension A′ A^2 is longer than the horizontal portion B of the lug, so that when said extension is bent down from the position shown in dotted lines in Fig. 6 to the position shown in full lines therein the part A′ of the extension forms the strengthening member F, which lies

underneath the horizontal member B, while the part A^2 of the extension is turned downward, as clearly shown in Figs. 4 and 5, and forms the depending flange or extension E.

It will be seen that in either of its forms my improved lug has a greatly-strengthened horizontal member without involving the necessity of corrugating the same, while in the forms shown in Figs. 2, 5, and 6 all slitting or cutting of the body of the lug and the consequent weakening thereof are done away with.

I do not limit my invention to a lug having a plurality of webs nor to the specific location of said webs, although the preferred construction has marginal ribs or flanges.

I claim—

1. A boiler-lug constructed from a sheet or plate of metal bent to provide an upright and a horizontal member and side ribs or flanges connecting said members, said horizontal portion having an extension which is bent or folded back upon the same, substantially as described.

2. A boiler-lug constructed from a sheet or plate of metal bent to provide an upright and a horizontal member and side ribs or flanges connecting said members, said horizontal member having an extension bent or folded back thereunder, substantially as described.

3. A boiler-lug constructed from a sheet or plate of metal bent to provide an upright and a horizontal member and side ribs or flanges connecting said members, the horizontal member being provided with an extension of greater length than itself, said extension being bent or folded back under said horizontal member, and its excess being bent to extend downward below the body of the lug and form the extension of the upright member, substantially as described.

4. A boiler-lug constructed from a sheet or plate of metal bent to provide an upright and a horizontal member, said lug having an integral strengthening rib or web extending longitudinally of its exterior and connecting the upright and the horizontal members thereof, and said horizontal portion having an extension which is bent or folded back upon the same, substantially as described.

GEORGE HENRY DRAKE.

Witnesses:
L. H. BRADLEY,
EDWARD L. BRADLEY.