

(No Model.)

G. L. MCGREGOR.

BOILER LUG AND METHOD OF MAKING THE SAME.

No. 479,331.

Patented July 19, 1892.

Fig. 2.

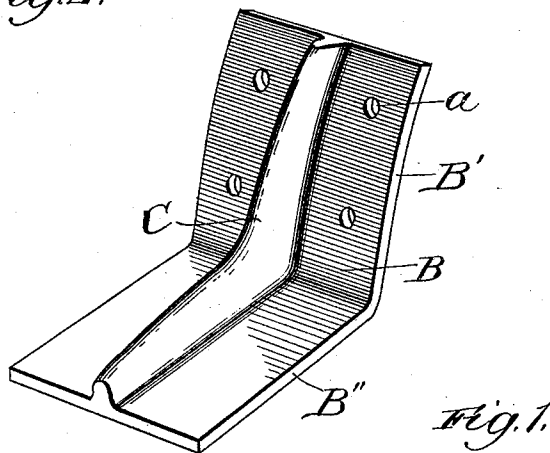


Fig. 1.

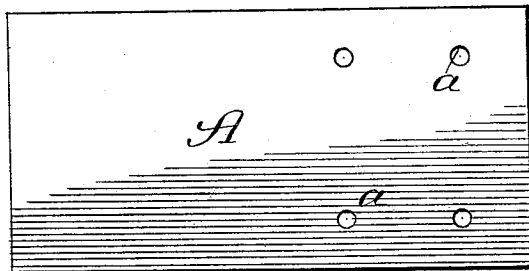
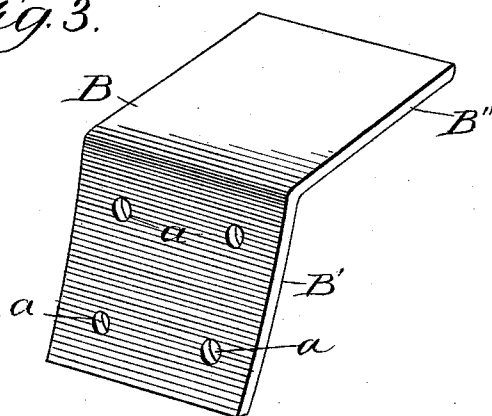


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE L. MCGREGOR, OF CHICAGO, ILLINOIS.

BOILER-LUG AND METHOD OF MAKING THE SAME.

SPECIFICATION forming part of Letters Patent No. 479,331, dated July 19, 1892.

Application filed December 14, 1891. Serial No. 414,989. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. MCGREGOR, a citizen of the United States, residing at Chicago, Illinois, have invented a new and useful Improvement in Boiler-Lugs and Methods of Making the Same, of which the following is a specification.

As is well known these lugs or brackets are used in connection with boilers to support them in various places in which they may be used. As heretofore constructed they have been made by casting, which has been objectionable and unsatisfactory, because lugs so formed have not been durable and have been liable to break, and, furthermore, it has been difficult to obtain as nice a fit with these lugs as is desirable, since one member of the lug is preferably curved to fit the boiler and the other left flat to rest upon the masonry or other support. My object is to avoid these defects, and I accomplish this by forming my lug out of a single piece of wrought-iron or steel at a single heating; and my invention consists in the method, features, and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of the metal blank from which the lug is made; Fig. 2, a perspective front view of the completed lug; and Fig. 3, a perspective rear view of such lug, its position being reversed.

A is a metal blank; *a*, holes therein; B, the completed lug, and C the strengthening-web thereof.

In making my improved lug or bracket I first make a blank A of any suitable material, as wrought-iron or steel, and of any desired dimensions, depending upon the size of the lug to be made. This blank is passed through suitable rolls to form the web or rib C, which preferably runs substantially along the middle of the blank. This webbed blank may be of any desired length, either, as shown in Fig. 1, of the requisite length to form one lug, or it may be first made longer and afterward cut into pieces of the desired length, the length of the blank being immaterial.

In further describing my method I shall use the word "blank" as meaning either the one made of the proper length in the first place or one of the pieces formed by dividing the

longer blank. The blank is then heated to the proper temperature and bent into the form shown in Figs. 2 and 3, wherein the members B' B'' stand at the desired angle to each other, the former being preferably slightly curved in order to conform to the shape of the boiler and the latter member left flat. When the blank is made in the first place of the proper length, the rolling and bending may be done at a single heating or not, as preferred, and also in this case the web may be made of greater height near the middle of the blank, so as to increase its width at the angle when the blank is bent. The bending will any way tend to increase the width of the web at the angle, thus strengthening the lug at its weakest point, and if the web is made wider at this point in the first place this will aid in giving additional strength. The blank being properly bent, holes *a* are drilled or punctured in the member B' to admit the fastening-rivets. Of course, if desired, these holes can be made before the blank is bent as well as afterward.

In applying this device the member B' is fastened to the boiler by riveting or by any other suitable means, and the member B'' rests upon or is embedded in the brickwork or other support. By this means I provide a lug which is highly efficient in operation and exceedingly simple and cheap in construction. As above indicated, the lug can be made from the blank in one continuous operation, or, if preferred, the webbed blank can be made first and then cut, bent, and drilled to form the lugs when desired.

I claim—

1. The improvement in the art of manufacturing boiler lugs or brackets, which consists in forming a metal blank, rolling such blank to form a web, and bending the blank to form the completed lug, substantially as described.

2. The improvement in the art of manufacturing boiler lugs or brackets, which consists in forming a metal blank, rolling the blank to form a web along the middle thereof, cutting the blank to the desired lengths, and bending the pieces so formed to make the completed lugs, substantially as described.

3. The improvement in the art of manufacturing boiler lugs or brackets, which consists

in taking a metal blank provided with a web, cutting such blank to the proper lengths and shapes, and drilling and bending the pieces so formed to make the completed lugs, substantially as described.

5 4. A boiler lug or bracket made out of a continuous metal blank by rolling the same to form a web and bending it to form a curved

member to be attached to the boiler and a flat member to rest upon the boiler-support, substantially as described.

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Witnesses:

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