A. JOHNSON.

PROTECTING SHOE FOR WASHBOILERS.

APPLICATION FILED SEPT. 8, 1920.

1,407,066. Patented Feb. 21, 1922.

Fig. 1.

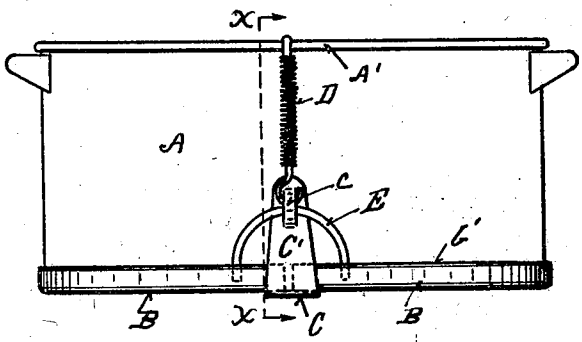


Fig. 3.

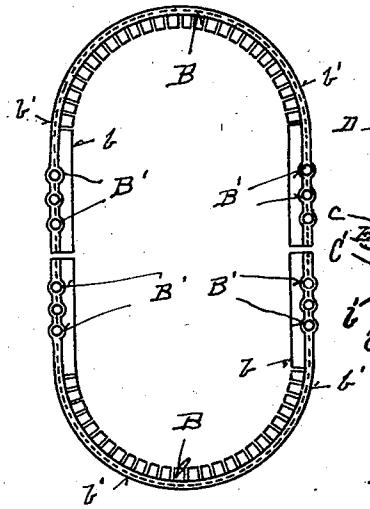


Fig. 2.

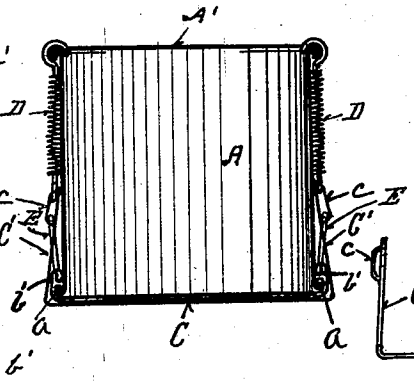


Fig. 4.

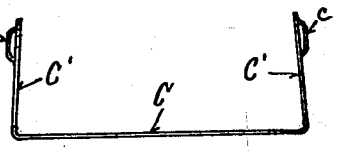
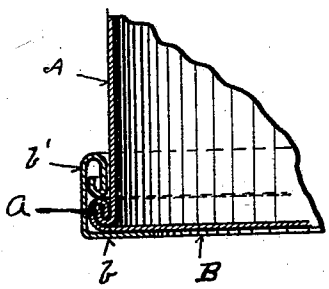


Fig. 5.



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PROTECTING SHOE FOR WASHBOILERS.

1,407,066. Specification of Letters Patent. Patented Feb. 21, 1922.

Application filed September 8, 1920. Serial No. 408,978.

To all whom it may concern:

Be it known that I, ADRIAN JOHNSON, a citizen of Sweden, residing at Bradford, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Protecting Shoes for Washboilers; 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

This invention relates to improvements in protecting shoes for wash-boilers, and similar receptacles, and consists substantially in the features hereinafter shown and described.

The object of the invention is to provide a sectional shoe adapted to be applied to the lower edge of a boiler or other receptacle and is provided with a horizontal flange projecting under the edge of the boiler, and a vertical overhanging flange adapted to engage the upturned seam connecting the bottom with the sides of the boiler in such a manner that when in place on the boiler it will remain securely attached thereto.

Another feature of this invention is, means of drawing the two sections of the shoe towards each other and against the ends of the boiler so that the shoe sections can be fitted to boilers of varying lengths and be drawn firmly against the ends thereof; and also means for firmly retaining the inner ends of the shoe sections in place against the bottom of the boiler.

These and other features of this invention are hereinafter fully set forth and explained and illustrated in the accompanying drawings in which:—

Figure 1, is a side view in elevation of a wash-boiler with my improved protecting shoe thereon.

Figure 2, is a vertical section of the same on the line *x—x* in Fig. 1.

Figure 3, is a plan view of my improved protecting shoe.

Figure 4, is a side view in elevation of the yoke engaging the inner ends of the shoe.

Figure 5, is an enlarged detail showing the engagement of the shoe with the seam at the bottom of the boiler.

In these drawings A indicates an ordinary wash-boiler, B B the sections of the shoe, and C the yoke for securing the inner ends of the shoe sections B B against the bottom of the boiler. The upturned ends C′ C′ of the yoke C extend upwardly against the sides of the boiler A, and are provided with loops *c c* which the lower ends of springs D D extending upwardly along the boiler, engage; the upper ends of said springs engaging the upper edge A′ of the boiler, whereby the yoke C is held firmly against the shoe ends and the bottom of the boiler.

In the upper edges of the inner ends of the shoes B B there are a series of holes B′ B′, which the lower ends of curved springs E E, passing through the loops *c c* in the upturned arms C′ C′ of the yoke C enter and operate to draw the shoe sections B B toward each other and firmly against the ends of the wash-boiler.

The shoe sections B B are made with a horizontal flange *b* extending a short distance under the lower edge of the boiler, and with an upturned overhanging flange *b′* adapted to engage the upturned seam *a* on the outside of the bottom of the boiler, joining the bottom and sides of the boiler together. This inturned flange *b′* on the shoes B B is preferably made by folding the upper portion of the flange *b′* inward upon itself, as clearly illustrated in Fig. 5, so that the flange *b′* will not present a sharp edge in engagement with the seam *a* and injure the same.

In utilizing my invention the shoe sections B B are placed against the ends of the lower edge of the boiler, the yoke C is then placed under the central part of the boiler so as to embrace the inner ends of the shoes B B, the springs E E are then placed in the loops *c c*, and the ends entered in the holes B′ in the shoes B B which operate to bring the shoes firmly against the ends of the boiler A, and the springs D D are then hooked into the loops *c c* and engaged with the upper edge A′ of the boiler A, whereby the shoes B B are firmly held in place so that the shoes will not be displaced by the handling and use of the boiler.

Having thus described this invention so as to enable others to utilize the same, what I claim is:

1. The combination in a protecting shoe mechanism for wash-boilers, of shoe sections

adapted to fit around the lower edge of the boiler, an upturned flange on the shoe sections adapted to engage the upper edge of the seam securing the sides and bottom of the boiler together, springs engaging the inner ends of the shoe sections for drawing them toward each other, a yoke passing under the bottom of the boiler and embracing the inner ends of the shoes, and springs engaging said yokes and the upper edge of the boiler.

2. The combination in a protecting shoe mechanism for wash-boilers, of shoe sections, a flange thereon fitting under the edge of the boiler bottom, and an upturned and inturned flange fitting around the seam securing the bottom and sides of the boiler together, and engaging the upper edge of said seam, a yoke extending under the central portion of the boiler and embracing the inner ends of said shoe sections, springs engaging said yoke and the inner ends of said shoes, and springs connecting the yoke with the upper edge of the boiler.

In testimony whereof I affix my signature.

ADRIAN JOHNSON.