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(No Model.)

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. No. 332,338.

H. P. FOLSOM. --- - - - -SPUT FOR BOILERS. Patented Dec. 15, 1885.

_Fig.1.

Fig. 2.

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Fig.4.









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WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY P. FOLSOM, OF BROOKLYN, NEW YORK.

SPUT FOR BOILERS.

BPECIFICATION forming part of Letters Patent No. 332,338, dated December 15, 1885.

Application filed August 21, 1885. Serial No. 175,026. (No model.)

To all whom it may concern: Be it known that I, HENRY P. FOLSOM, a citizen of New York, residing at Brooklyn, in the county of Kings and State of New York, 5 have invented certain new and useful Improvements in Sputs for Boilers; 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 10 appertains to make and use the same, reference being had to the accompanying drawings, wherein— Figure 1 is a perspective view of the sput. Fig. 2 is a cross-section of the sput. Fig. 3 is 15 a cross-section of the sput in position in a boiler where the orifice is flush with its surface, the sput having been clinched and tapped.

in the usual manner, riveting the sput firmly in position. To facilitate this operation, I 45 bevel the upper edge of the sput upward from the inner to the outer circumference, by which means I also save metal. When thus riveted, the sput is permanently attached with closefitting collars or flanges, tightly compressing 50 each side of the boiler-shell.

I am aware that a snug or ring has been made intended for the purpose; but in that case a plain ring has been put into an irregular-shaped orifice while hot, and compressed, 55 so that some part of the metal of its external circumference has been forced into the spaces between the ring and the edge of the boileraperture; but such device is unlike mine, and, besides, being put in hot, it is liable to $con \cdot 60$ tract, and its slight hold upon the edges results in its detachment. Having described my invention, what I claim to be new, and desire to secure by Letters 65 Patent, is— 1. A sput for making attachments to boilers, having a circular inner circumference, an irregular outer circumference fitted to closely fill the aperture in the boiler, and provided with a flange or collar on one end thereof, 70 substantially as described. 2. A sput for making pipe attachments to boilers, having a circular inner circumference and an outer circumference other than circular to be fitted into an aperture in the boiler 75 of like shape, which sput is provided with a collar on one edge and has the other edge so constructed that it may be struck down to rivet the sput firmly in its position, substantially as described. 80 In testimony whereof I affix my signature in presence of two witnesses. HENRY P. FOLSOM. Witnesses: GEO. A. DRAKE, ROBT. H. HOILE.

Fig. 4 is a section of a boiler, showing sput in position, the collar being in dotted lines. Fig.

- 20 5 is a section of sput to be used when orifice in boiler is struck up, and Fig. 6 shows Fig. 5 in position in boiler clinched and tapped.
- The object of my invention is to secure a sput which can be economically employed in
- 25 making pipe connections with boilers, and which when applied will be permanently and thoroughly fastened.

The nature of my invention consists in the peculiar construction of the sput and in the 30 method of its application to the boiler.

In the drawings, A represents a section of the shell of a boiler, in which an aperture has been made of a shape other than circular, preferably oval or irregular elliptical.

B is a sput, with collar C on its under side, which sput in exterior circumference is coincident with and closely fits into the said aperture in the boiler. The inner circumference of the sput B is circular, and is intended to be threaded in the usual manner. The sput B is

placed in the said aperture cold or hot, and is supported by a mandrel, and the upper edge struck down by a die or other suitable device