W. D. BANKS.

BOILER STAND.

APPLICATION FILED NOV. 21, 1916.

1,240,648. Patented Sept. 18, 1917.

Fig. 1.

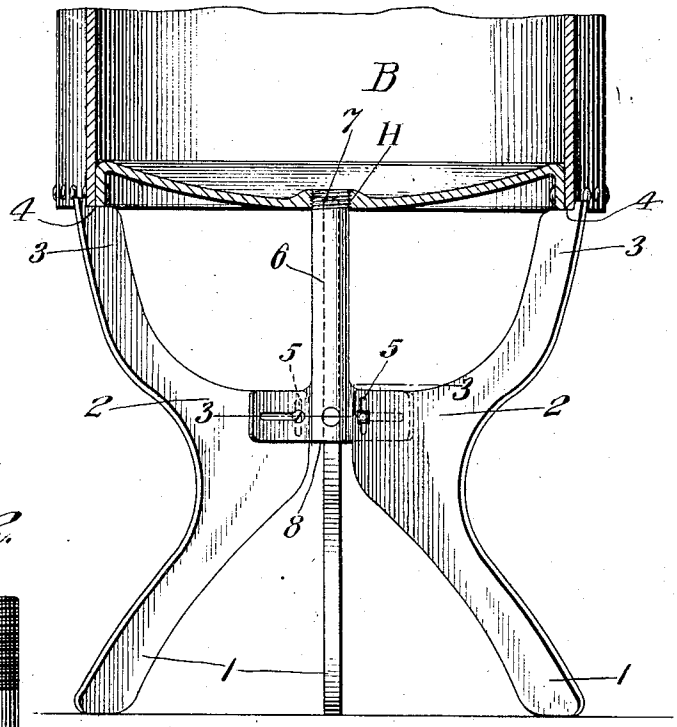


Fig. 2.

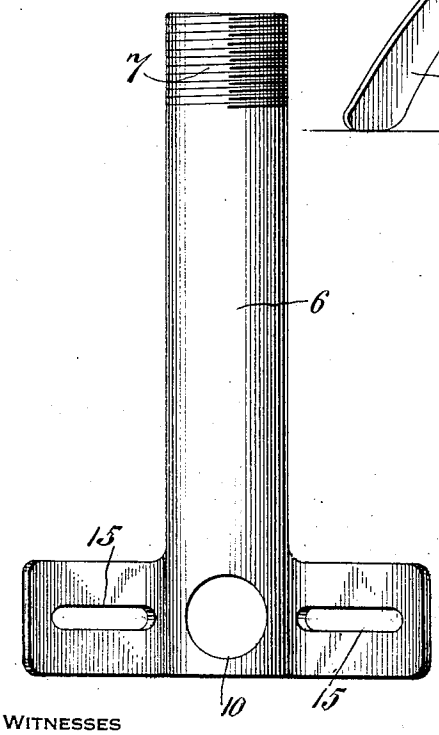
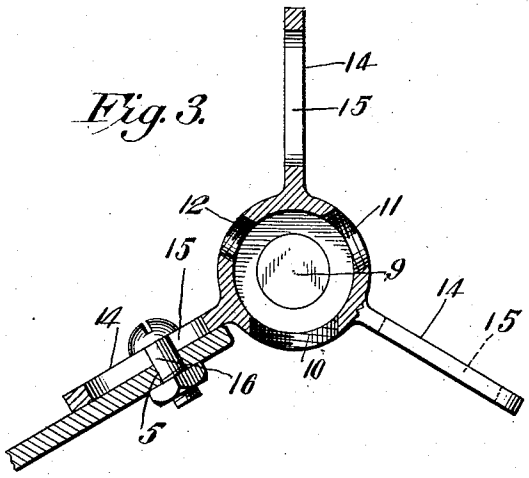


Fig. 3.



WITNESSES

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BOILER-STAND.

1,240,648. Specification of Letters Patent. Patented Sept. 18, 1917.

Application filed November 21, 1916. Serial No. 132,646.

To all whom it may concern:

Be it known that I, WILLIAM D. BANKS, a citizen of the United States, residing at Clarksburg, in the county of Harrison and State of West Virginia, have invented new and useful Improvements in Boiler-Stands, of which the following is a specification.

This invention relates to supports, and more especially to stands such as are intended for supporting a hot water boiler in upright position near a range or furnace; and the object of the same is to produce a stand of this kind adjustable to fit the size of the boiler and including an element which engages the outlet hole in the bottom of the boiler to both hold the latter on the stand and serve as part of the drain pipe.

This and other objects are accomplished by constructing the device in the manner hereinafter more fully described and claimed and as shown in the drawings wherein:—

Figure 1 is a side elevation of this improved stand in use, showing the boiler supported upon it and in section.

Fig. 2 is an enlarged side elevation of the tubular element of the stand.

Fig. 3 is an enlarged cross sectional detail, taken on about the line 3—3 of Fig. 1.

Hot water boilers, as is well known, are usually upright cylinders B of metal containing thirty gallons or forty gallons, or perhaps more or less, and each having an outlet hole H in its bottom; and when the boiler is to be set up adjacent the range or furnace a stand is required to hold it off the floor and in such position that the inlet and waste pipes and the connections to and from the water back may be suitably attached. The present invention is a stand which is to be utilized for this purpose, and one element of which is a central tubular member which screws into the hole in the bottom of the boiler and holds it on the other members or legs.

Coming now to a specific description of the details of the invention as illustrated in the drawings, there are three like elements of cast metal which I will call legs, each having a foot 1 at its lower end, a knee 2 at its center, and an arm 3 at its upper portion, the upper extremity of the arm being shouldered as at 4 for the reception of the chine at the lower end of the boiler body B. Each knee is an integral projection extending inward from the general line of the leg and vertically slotted as at 5. A fourth member or element is a tubular bolt of malleable iron which I will call the stem, the same having an upright shank 6 threaded at its upper end at 7 for engagement with the hole H in the lower end of the boiler, and having its lower extremity closed as seen at 8 in Fig. 1, or, if desired, provided with an opening which may be closed by a plug 9 as seen in Fig. 3, which to this extent is a slight modification. In any event there is formed in one side of this member at its lower end an outlet opening 10 for a three-quarter inch nipple and an additional opening 11 for a half-inch nipple, with possibly a third opening 12 for either a half-inch nipple or one differing in size from either of the other openings. Such of these holes or openings as are not used can be plugged, as the plumber will understand, and one or more of the others may be connected by suitable nipples (not shown) with the waste or drain pipe, which I do not consider it necessary to illustrate. The several openings 10, 11 and 12 are equally spaced, center to center, around the sides of the lower end of this member; and between them are outstanding wings or fins 14, each provided with a horizontal slot 15 adapted, when the wing lies alongside a knee 2, to cross the slot 5 as seen in Fig. 1. Through such crossing slots is passed a bolt 16 as best seen in Fig. 3, and when the nuts on all the bolts are tightened up the stem serves to lock the several knees to the bottom of the boiler and to hold the legs in adjusted position. The obvious purpose of the horizontal slots 15 is to permit the arms 3 to be spread so that their shoulders 4 will engage a boiler of larger diameter, or to be contracted so as to fit the device to a smaller boiler; and the obvious purpose of the upright slots 16 is to permit vertical adjustment of the several legs to bring their shoulders close up against the chine of the boiler, after which the bolts are tightened to hold all parts and to render the stand rigid.

In use, the plumber has but to turn the boiler on its side and insert the stem, making a water-tight fitting between the threads 7 and the hole H; then he brings the three legs into place, laying the knee 2 of each alongside one of the fins or wings 14; then the several legs are adjusted so that all parts are tight, and the bolts 16 are put into place

and their nuts screwed home. The boiler with its stand is now placed in position, and the proper connections made with the service pipe in the house and the pipes leading to and from the hot water jacket in the furnace or range; and finally he will plug such of the holes 9, 10, 11 and 12 as are not in use, and connect a nipple with the remaining one so that a draw-off cock or faucet can be attached as usual. Or it is possible for him to use two of these openings, connecting one of them to the pipe which leads back to the water back. They are obviously made of different size to accommodate the gage of pipe he is using. I do not wish to be limited to the exact details of construction, and changes in details may be made without departing from the principle of the invention. While I have spoken of making the leg members of cast iron and the stem member of wrought iron, this is only a matter of preference. Also it is clear that I might employ a greater number of legs than three and a corresponding number of wings, but unless the boiler is supported in some additional manner I would not have less than three for obvious reasons. The exact location of the several holes near the lower end of the stem is a matter of preference, and I may omit some of them or all of them but one which I consider necessary for the drain outlet.

What I claim as new is:

1. A boiler stand comprising a plurality of legs, each having an inwardly projecting knee provided with a slot, a tubular stem adapted to be tapped into the lower end of the boiler and having a plurality of laterally projecting wings adapted to lie alongside said knees, means for connecting the drain pipe with said stem, and a bolt through each wing and the slot of the contiguous knee.

2. A boiler stand comprising a plurality of legs, each having an inwardly projecting knee provided with a slot, a tubular stem adapted to be tapped into the lower end of the boiler and having a plurality of laterally projecting wings adapted to lie alongside said knees and each provided with a slot standing at right angles to that in the knee, and a bolt through the slot in each wing and the slot in the knee adjacent.

3. In a boiler stand, the combination with a plurality of legs each having a foot at its lower end, an arm at its upper end shouldered at its upper extremity, and an inwardly projecting knee between these elements; of a tubular stem whose upper end is adapted to be tapped into the lower end of the boiler and whose lower end is provided with a plurality of radially projecting wings and a series of outlet holes between the latter, and adjustable connections between each knee and the contiguous wing, for the purpose set forth.

4. In a boiler stand, the combination with a plurality of legs, each having an inwardly projecting knee provided with an upright slot; of a tubular stem threaded at its upper end and adapted for connection with the lower end of the boiler and having at its lower end a plurality of radially projecting wings each provided with a horizontal slot and a series of differently sized holes between said wings, and bolts whereof each passes through a slot in one wing and the slot in the knee adjacent, for the purpose set forth.

In testimony whereof I affix my signature.

WILLIAM D. BANKS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."