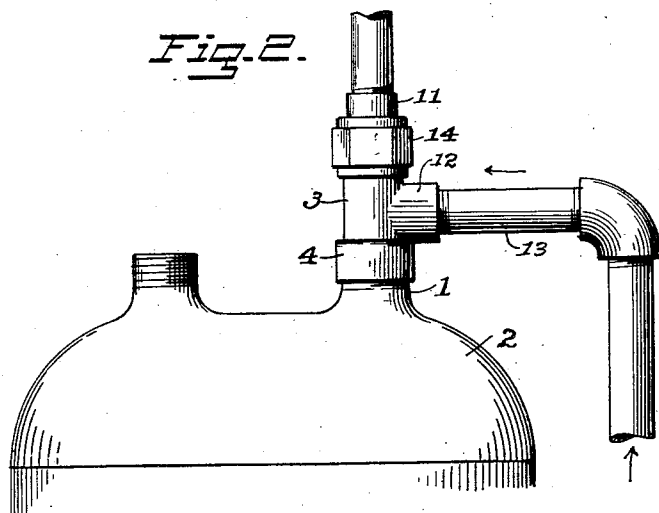
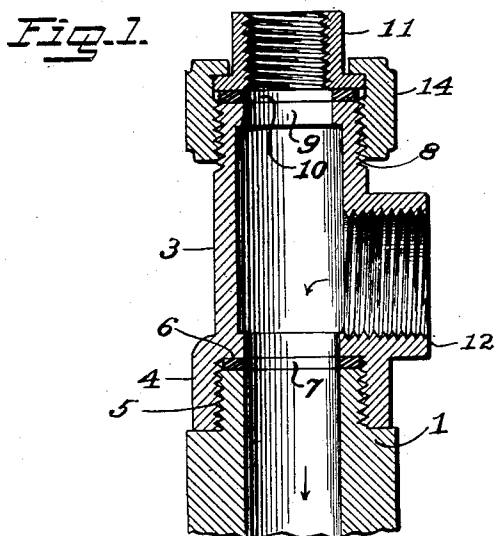


No. 738,208.

PATENTED SEPT. 8, 1903.

J. J. LAWLER.
FITTING FOR HOT WATER BOILERS.
APPLICATION FILED AUG. 8, 1902.

NO MODEL.



WITNESSES:

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JAMES J. LAWLER, OF MOUNT VERNON, NEW YORK.

FITTING FOR HOT-WATER BOILERS.

SPECIFICATION forming part of Letters Patent No. 738,208, dated September 8, 1903.

Application filed August 8, 1902. Serial No. 118,863. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. LAWLER, a citizen of the United States, residing at 314 South Third avenue, Mount Vernon, county of Westchester, State of New York, have invented a new and useful Improvement in Fittings for Hot-Water Boilers, of which the following is a specification.

My invention relates to a T-fitting adapted to be interposed between a kitchen-range boiler and the hot-water-return connection, the object being to afford a simple and practical means of adapting such a boiler when connected with the water-back of a coal-range, so that either gas or coal can be used as a means for heating the water and for "setting up" or causing a circulation of the water in said boiler.

In the drawings, Figure 1 shows a central sectional view of my improved fitting, and Fig. 2 is an elevation showing my fitting as connected up on a boiler. Arrows show the direction of the water.

Similar reference-numbers indicate similar parts in the two views.

1 is the so-called "spud" of a kitchen-boiler 2.

My improved fitting is in the shape of a T, the body 3 having an enlargement at the lower end 4, provided with a female thread 5.

By reason of this shape an annular shoulder 6 is formed.

7 is a washer between the upper end of spud 1 and the shoulder 6 for making a tight joint.

The upper end of my improved fitting is provided with a male thread 8, having the same diameter and pitch as the spud 1. The upper surface is contracted so as to form an annular inner flange 9, which affords a bearing for the washer 10, which is used at that point to make a water-tight joint between the fitting and the coupling 11.

14 is a swivel-nut.

12 is a side inlet provided with a female thread for the reception of the return or hot-water pipe 13.

The parts of the fitting shown by numbers 3, 4, 6, 9, and 12 are all cast integral, the length of the fitting being made as short as possible for the reason explained in the operation.

The operation or use of my fitting is as follows: We will presume a kitchen-boiler is connected with the water-back of a coal-range and it is desired to adapt the boiler for storing

hot water heated by gas. Unscrew coupling-nut 14 from spud 1. Interpose my improved fitting, as shown in Figs. 1 and 2, by screwing the female end of fitting on spud 1 and the coupling 14 on the male thread 8, using fiber paper or any suitable washers 7 and 10 at the two places shown. By the use of these washers no lead, cement, or other means to make a tight joint need be resorted to, the flat annular surfaces tending to compress the washers evenly, as is common in the ordinary couplings. By connecting a pipe 13 from any preferred gas water-heater (not shown) and by the usual cold-water connection (also not shown) a circulation of the water is established.

When lead pipe is used to connect up the hot-water service of a house, such pipe can be easily bent when interposing my improved T, and when wrought-metal pipe is used, owing to the shortness of the fitting, the pipe will spring or yield sufficiently to permit the connecting up to be made without cutting the house-service.

By the use of my T-fitting the work of converting a boiler for use with either gas or coal is quickly and cleanly done, as there are no joints to wipe or any cutting or alteration required in the return-pipes of the boiler.

Such being the full description of my invention, what I claim as new, and desire to secure by Letters Patent, is—

A fitting for hot-water boilers consisting of a body having an enlarged interiorly-threaded portion at its lower end for connection with the boiler-spud, a shoulder formed by said enlargement, a washer seating on said shoulder and held between same and the boiler-spud, the upper end of the body having a male threaded portion of the same diameter as the spud, a coupling for connection to said male threaded portion and the water-pipe, and an internally-threaded side inlet for connection with the heater-pipe.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 1st day of August, 1902.

JAMES J. LAWLER.

Witnesses:

ELIAS WHITNEY,
WILLIAM R. MONAHAN.