(No Model.)

D. L. DWINNELL.

FITTING FOR HOT WATER AND STEAM PIPES.

No. 431,452. Patented July 1, 1890.

Fig. 1

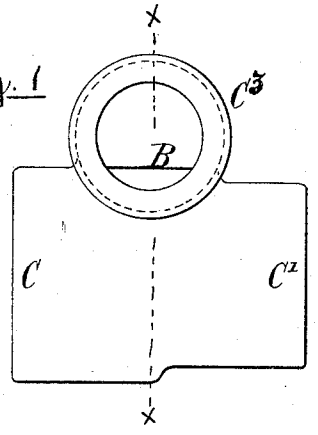


Fig. 2.

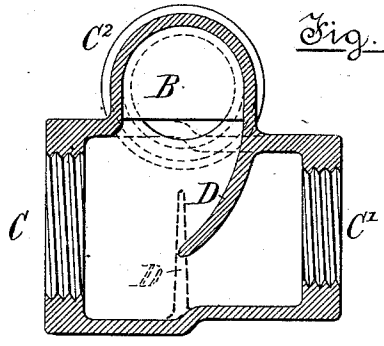
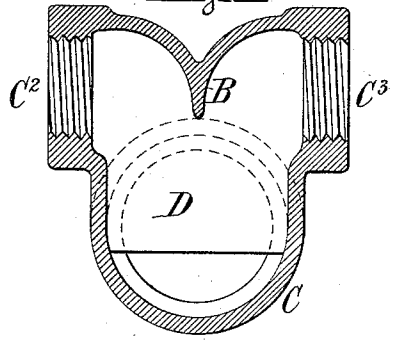


Fig. 3.



INVENTOR:

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WITNESSES:

M. W. Marler.

J. B. Wilson.

UNITED STATES PATENT OFFICE.

DAVID LANCASTER DWINNELL, OF MONTREAL, QUEBEC, CANADA, ASSIGNOR OF ONE-HALF TO GEORGE ANGUS MILLER AND CHARLES HERBERT MILLER, OF SAME PLACE.

FITTING FOR HOT-WATER AND STEAM PIPES.

SPECIFICATION forming part of Letters Patent No. 431,452, dated July 1, 1890.

Application filed March 12, 1890. Serial No. 343,614. (No model.) Patented in Canada November 22, 1888, No. 30,254.

To all whom it may concern:

Be it known that I, DAVID LANCASTER DWINNELL, of the city of Montreal, in the District of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Fittings for Hot-Water and Steam Pipes, (for which Letters Patent have been granted me in Canada, No. 30,254, dated November 22, 1888;) and I do hereby declare that the following is a full, clear, and exact description of the same.

My object is to diminish the number of parts necessary for coupling a number of pipes together at any point in hot-water systems and to facilitate the proper clearance of the different pipes from each other and to prevent "bucking" together of two streams, thus aiding the circulation.

In the drawings, Figure 1 represents a side view of a cross-coupling for four pipes. Fig. 2 is a vertical section of the same, and Fig. 3 a vertical section on line *x x* of Fig. 1.

The main body of the coupling consists of the branches C C′, which may connect with the main pipe of the systems. Cross branches C^2 C^3 are formed with the main body offset thereto and extending at right angles to main branches. These cross branches may be of smaller diameter, if desired, to receive small pipes. The wall of each branch C^2 C^3 is curved outwardly, and said walls are continued inward, forming a partition B, the sides of which are curved and form continuations of the curved walls of both the branches, so that the water will be turned and directed without impinging against any surfaces extending squarely across its path, and the two streams will be prevented from bucking.

Within the main body of the coupling a partition D extends partially across, being curved from the upper wall, and this partition performs similar functions to those above mentioned for the branches C C′. The partition D may extend from the opposite side of the coupling, as shown in dotted lines.

I claim as my invention—

1. A coupling consisting of the branches C C′, the cross branches C^2 C^3, offset to one side thereof and communicating with the main branches C C′, the partition B in said cross branches, and a partition D in the main branches, substantially as described.

2. A coupling consisting of main branches C C′ and cross branches C^2 C^3 formed therewith and offset to one side thereof, substantially as described.

Montreal, January 10, 1889.

DAVID LANCASTER DWINNELL.

Witnesses:
R. A. KELLOND,
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