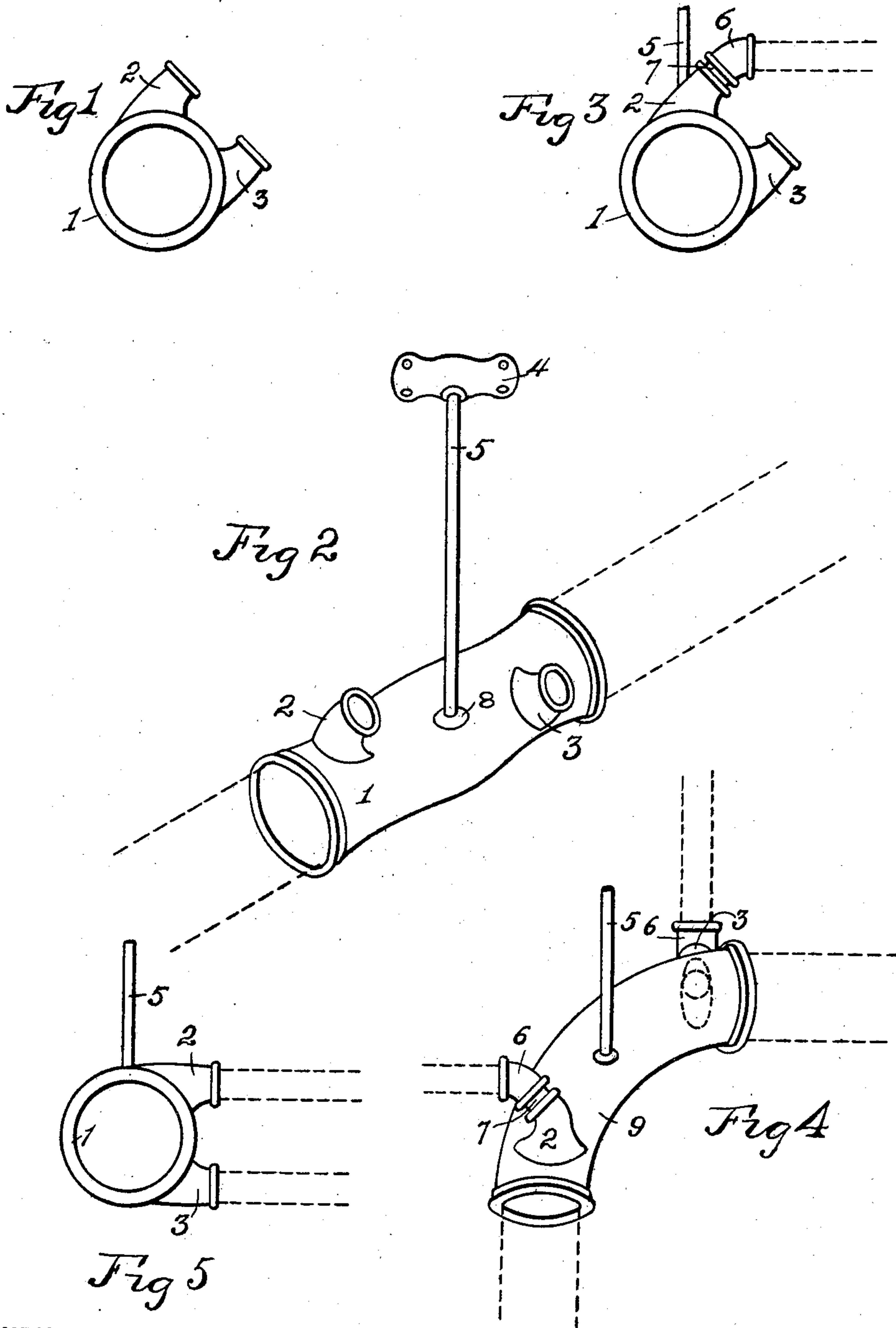


No. 896,762.

PATENTED AUG. 25, 1908.

E. A. SCHENCK.
HOT WATER MAIN FITTING.
APPLICATION FILED SEPT. 14, 1905.



WITNESSES:

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EUGENE A. SCHENCK, OF KANSAS CITY, KANSAS.

HOT-WATER-MAIN FITTING.

No. 896,762.

Specification of Letters Patent.

Patented Aug. 25, 1908.

Application filed September 14, 1905. Serial No. 278,533.

To all whom it may concern:

Be it known that I, EUGENE A. SCHENCK, a citizen of the United States, residing in Kansas City, in the county of Wyandotte and State of Kansas, have invented a certain new and useful Improvement in Hot-Water-Main Fittings, of which the following is a full, clear, and exact description, reference being had therein to the accompanying drawings.

My invention relates to hot water main fittings.

The object of my invention is to provide a fitting adapted to be used in connection with steam or hot water heating systems which will permit rapid circulation of the hot water, with a very small amount of friction or resistance to the passage of the water.

A further object of my invention is to provide a fitting by which time and labor are saved in the installation of the system, and with which the tees and nipples ordinarily employed for connecting the main with its branches may be dispensed with, thus affording a material saving in the material used in constructing the heating system.

My invention provides further, a fitting which permits the disposal of the main very near the ceiling, thereby giving a large amount of head room.

My invention provides further, a fitting comprising a pipe section having branches with oval bases disposed transversely to the axis of the pipe section and converging gradually each to a round portion adapted to receive the pipes connecting with the radiator, the branches being disposed 90 degrees apart relative to the circumference of the pipe section, the outlet branch being disposed upon the upper side of the pipe section, thus affording a construction in which the hot water will pass readily and with little resistance from the upper side of the main into the branch leading to the radiator or riser.

My invention provides further, a novel means of hanging the fitting which properly grades without the use of a level, the fitting and the branches connected with it.

My invention provides further, a fitting in the form of a tee, in which small fittings near the main may be dispensed with.

My invention provides further, a fitting comprising a reversible ell having 45 degree branches which, when employed, will dispense with the cost of tees and short nipples when installing a main.

My invention provides further, a fitting which may be readily gripped by the chain tongs.

Other novel features of my invention are hereinafter described and claimed.

Figure 1 is an end elevation of my improved fitting having the form of a tee. Fig. 2 is a perspective view of the tee fitting, together with my improved hanger used in connection therewith. Fig. 3 is an end elevation of the tee fitting shown in the position occupied by it when two 45 degree ells are employed in connection with it, one of said ells and the nipple connecting it with the outlet branch being shown. Fig. 4 is a perspective view of my improved fitting having the form of an ell. Fig. 5 is an end elevation of the tee fitting, shown in the position in which it is used when connected to the radiator pipes without employing any small fittings near the main.

Similar characters of reference denote similar parts.

Referring to Figs. 1, 2, 3, 4 and 6, which illustrate my improved tee fitting, 1 denotes a straight pipe section, of cylindrical form, having a bore of uniform diameter and provided adjacent opposite ends with two branches 2 and 3, each having an oval base disposed transversely to the axis of the pipe section 1 and at angles to the base of the other branch, each branch converging gradually to a round outlet portion and the axis of each branch being disposed substantially at an angle of 45 degrees to its base. The axes of said branches are parallel. The major axes of the bases of said branches have their distant ends terminating at substantially diametrically opposite points on the pipe section, thereby permitting free entrance and discharge to and from the pipe section through said branches. Means intermediate the branches 2 and 3 are provided for supporting the fitting. The hanger comprises preferably, a horizontal plate 4, adapted to be secured to the ceiling and having secured to it the upper end of a vertical member comprising preferably a pipe 5, the lower end of which is fitted to a circular, threaded, blind recess or opening provided in the upper side of the thickened portion of the pipe section 1 intermediate the branches 2 and 3. The disposition of the said recess is such that when the pipe section 1 and branches 2 and 3 are inclined so water may flow therein, the hanger pipe 5 will be in a

vertical position. By means of this construction by simply disposing the hanger pipe 5 in a vertical position, which may be done with the aid of the eye alone, even an amateur fitter will be enabled to properly grade the pipe section and branches without employing a level and without danger of improperly grading the branches. The branch 2 is disposed at the upper side of the pipe section 1 where the water is the hottest and by reason of its oval shape, even when the fitting is positioned as shown in Fig. 6, no trap is formed adjacent the outlet branch 2 and the hot water will therefore be readily discharged through said branch 2.

When the fitting is positioned as shown in Figs. 3 and 4, the branch 2 may be connected with the outlet branch pipe by means of a 45 degree ell 6, and a nipple 7. The branch 3 may also be connected in a similar manner with its pipe connections. When the fitting is used as shown in Fig. 6, the nipples and 45 degree ells may be dispensed with and the branch pipes connected directly in positions inclined slightly to the horizontal, or at proper grade, to the branches 2 and 3.

In Fig. 5 I have shown the pipe section in the form of an ell; the construction however, is otherwise substantially the same as the tee fitting just described with the exception that the hanger pipe 5 has its lower end fitted in the blind recess, provided in the upper side of the ell pipe section denoted by 9, said recess being located in a boss or mound 8, upon the periphery of and integral with the pipe section 9. The pipe section diametrically opposite the boss 8 has a corresponding recessed boss for the insertion of the hanger pipe 5 when the upper and lower sides of the pipe section 9 are reversed from the position shown in Fig. 5. The branches 2 and 3 are connected with their branch pipes, shown in dotted lines, by means of 45 degree ells 6, and nipples 7 in the same manner as described relative to the pipe section 1.

It will be understood that the ends of the pipe sections 1 and 9 will be threaded in the ordinary manner to receive the threaded

ends of the other pipe sections of the main, shown in dotted lines. In a like manner the round openings of each of the branches 2 and 3 will be threaded to receive a nipple 7.

My invention may be modified in various ways within the scope of the appended claims without departing from its spirit.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

1. A pipe fitting comprising a pipe section having two branches smaller than the pipe section, each branch having an oval base, the major diameter of which is transverse to the axis of the pipe section, each branch converging gradually from the periphery of the pipe section to a round outer end, said branches being parallel with each other, and the periphery of the pipe section between said branches having a recess disposed vertically when the pipe section is inclined and adapted to have a hanger fitted therein.

2. A pipe fitting comprising a pipe section having two branches smaller than the pipe section, each branch having an oval base, the major diameter of which is transverse to the axis of the pipe section, each branch converging gradually from the periphery of the pipe section to a round outer end, each branch projecting substantially at an angle of 45 degrees to the plane of its base, and the periphery of the pipe section between said branches having a circular blind recess disposed vertically when the pipe section is inclined.

3. In a pipe fitting, the combination with a pipe section having two branches, each branch having an oval base the major diameter of which is transverse to the axis of the pipe section, each branch converging gradually from the periphery of the pipe section to a round outer end, the periphery of the pipe section between said branches having a recess, adapted to have a hanger fitted therein.

EUGENE A. SCHENCK.

Witnesses:

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