A. HOLLOWAY.

PIPE CONNECTION.

APPLICATION FILED SEPT. 15, 1909.

943,677. Patented Dec. 21, 1909.

Fig. 1.

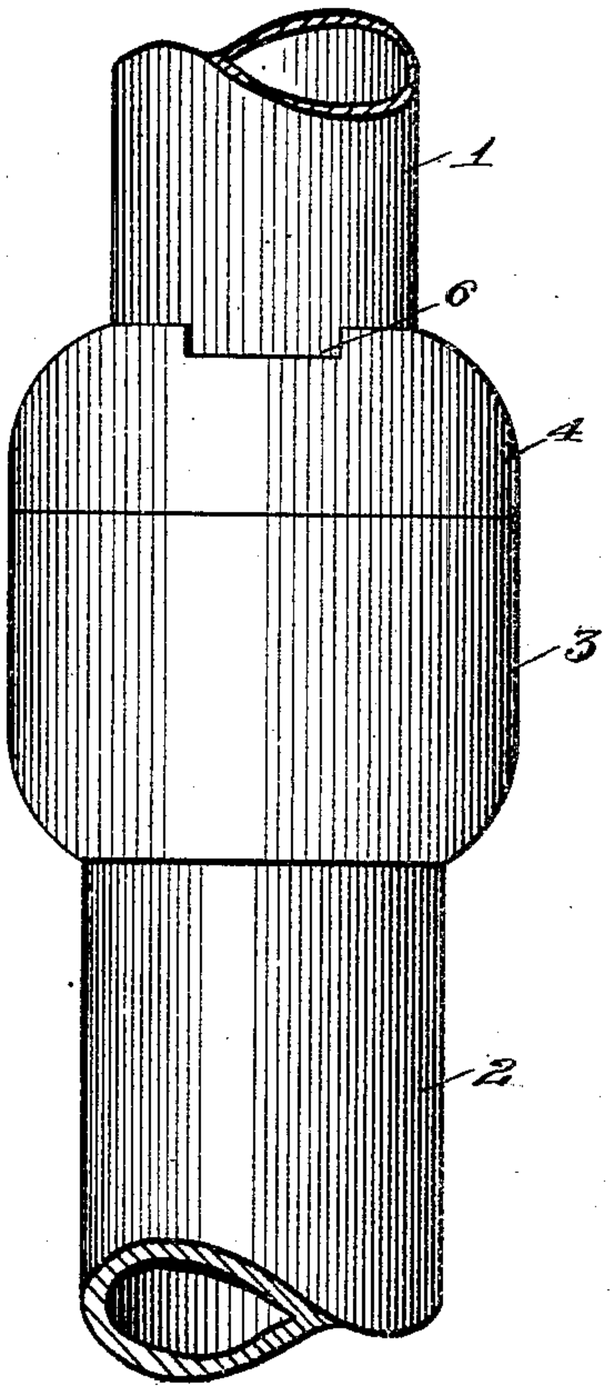


Fig. 2.

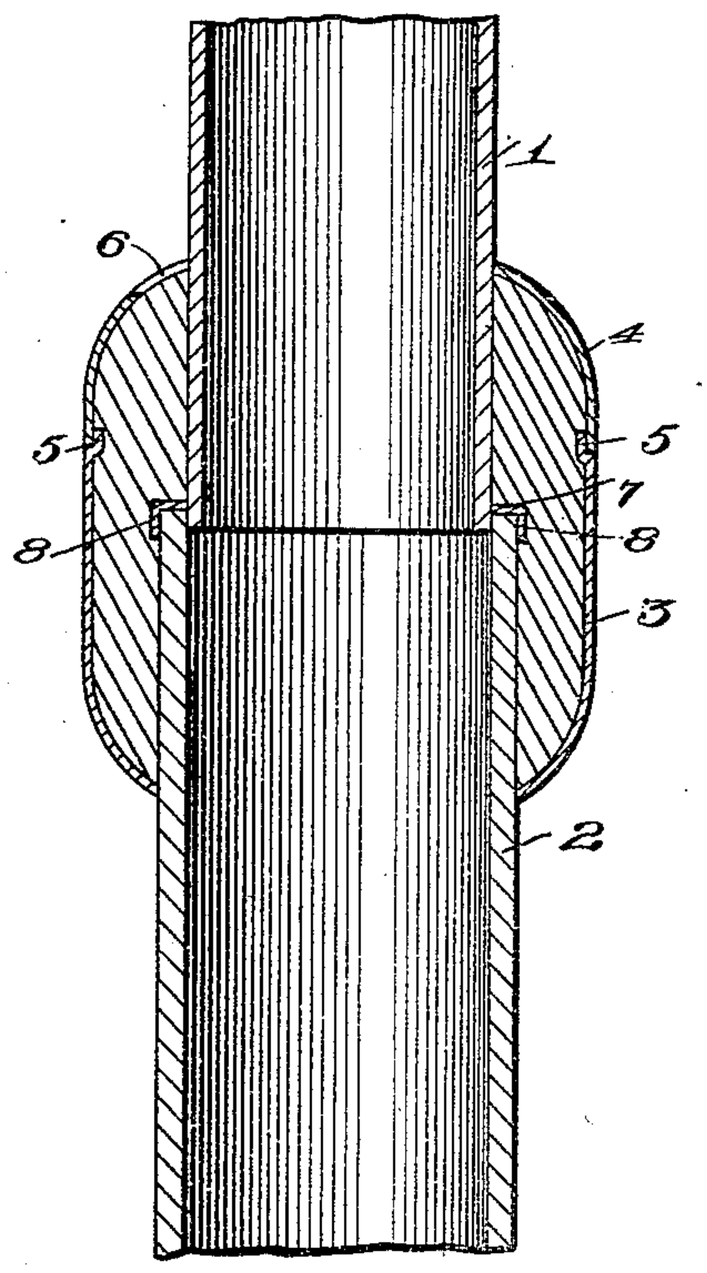
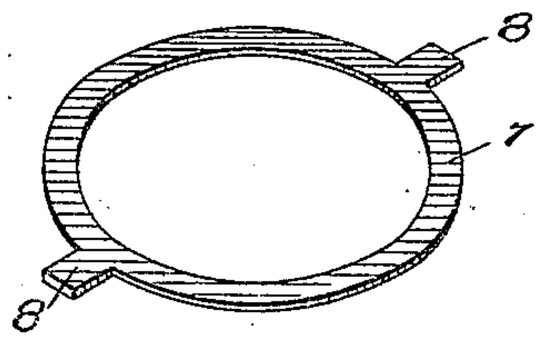


Fig. 3.



Witnesses

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ALFRED HOLLOWAY, OF ROCHESTER, NEW YORK.

PIPE CONNECTION.

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To all whom it may concern:

Be it known that I, ALFRED HOLLOWAY, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Pipe Connections; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

The present invention relates to pipe connections and more particularly to the type in which a binding material is molded about the proximate ends of two pipe sections, the object being to provide a connection which may be quickly and easily formed and when completed will be neat in appearance.

To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings: Figure 1 is an exterior view of the joint; Fig. 2 is a longitudinal sectional view; and Fig. 3 is a perspective view of the protecting ring.

In the embodiment of the invention herein illustrated the joint is formed in a vertically arranged piping comprising a brass section 1 fitting in a lead section 2. These sections are surrounded at their proximate ends by a casing divided on a line transverse to the piping to provide two sections or members 3 and 4. Each of these members is preferably cup-shaped and has a central opening with a diameter less than the internal diameter of the cup-shaped member in order that the latter may receive a pipe section and provide a space about the piping for the reception of a suitable binder. The adjacent ends of the members are held against lateral displacement preferably by a reduced portion 5 on the member 3 fitting in the other member.

In making the joint on a vertical piping both members are slipped over their respective pipe sections and the member 3, which may be longer than the member 4, is held in any suitable manner so that its upper end is above the upper end of the lowermost pipe section of the joint. A binder, such as molten metal, is then poured to fill the member 3 and left to harden after which the other member 4 is moved downward onto the reduced portion 5 and is filled with molten metal through the opening in the top thereof. The metal when hardened unites both members of the casing to the pipe sections. If a horizontal joint is to be made, both members 3 and 4 are connected before the molten metal is poured about the piping, an opening 6, of course, then being provided in the side of one of the cup-shaped members.

The fusing point of the molten metal is lower than the fusing point of the lead pipe 2 but in some instances the molten metal will have a temperature as it passes from the ladle sufficient to affect the lead pipe. In order to prevent this and at the same time to prevent the entrance of the molten metal between the pipe ends when the end of the lead section is imperfect due to the fitting of said section about the brass section 1, there is employed a protector consisting in this instance of a flat ring 7 covering the end of the lead section and having flanges 8 adapted to be bent downwardly about the lead section to hold the ring in position while the brass pipe is being fitted therein.

A joint or connection constructed in accordance with this invention may be quickly and perfectly formed and when completed will be very neat in appearance as the casing which holds the binder is polished or otherwise ornamented. The joint may be formed while the pipe sections are arranged vertically, a result which is impossible with the ordinary wiped joint, and consequently the unions which have heretofore been employed on opposite sides of a wiped joint may be eliminated. As the casing is divided transverse to the piping it is possible to pour the molten metal into one cupped member while holding the other member away from the joint. This permits the operation of making the joint to be watched by the workman.

I claim as my invention:

1. A casing for pipe connections having a chamber for holding binding material about a piping and comprising two members connected on a line transverse to the piping and each having an opening for the passage of a pipe section.

2. A casing for holding binding material about a piping comprising a cup-shaped member having a central opening with diameter less than the internal diameter of the cup-shaped member to provide a space about the pipe section for a binder, and a member coöperating with said cup-shaped mem-

ber and having a central opening adapting the member to surround another pipe section.

3. A casing for pipe connections comprising two cup-shaped members, one of which fits within the other and each of which has a central opening of less diameter than the internal diameter of the cupped portion thereof.

4. The combination with a pair of pipe sections, of a casing having a chamber for holding binding material about the proximate ends of the sections, said casing comprising two members connected on a line transverse to the piping, and a binding material within the casing uniting the latter to the piping.

5. In a pipe connection, the combination with a vertical piping embodying two sections, of a cup-shaped member surrounding the lower section and having its upper edge above the upper edge of the lower section.

6. A pipe connection comprising two pipe sections, one of which fits within the other, a protector covering the end of the outer section, a casing surrounding the joint between the sections, and a binder within said casing uniting the latter and the pipe sections.

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Witnesses:
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