C. M. HANDOVER.

Pipe-Coupling Nipple.

No. 204,566. Patented June 4, 1878.

Fig. 1.

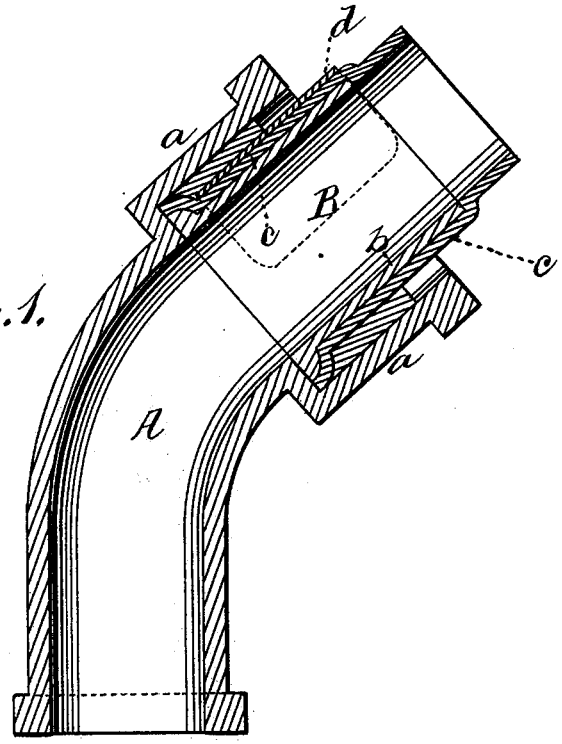
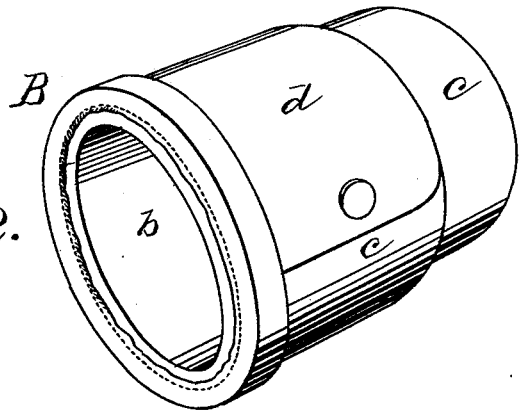


Fig. 2.



WITNESSES

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CHARLES M. HANDOVER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PIPE-COUPLING NIPPLES.

Specification forming part of Letters Patent No. **204,566,** dated June 4, 1878; application filed May 18, 1878.

To all whom it may concern:

Be it known that I, C. M. HANDOVER, of Brooklyn, in the county of Kings and State of New York, have invented a new and valuable Improvement in Pipe-Coupling Nipples; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of longitudinal central section of my improved nipple as applied, and Fig. 2 is a detached perspective view of the same.

This invention has relation to improvements in means for coupling lead pipes to iron sewer-pipes, or to pipes of other materials for the like purpose.

The object of the invention is to provide a lead nipple, to which the leaden pipes may be soldered, that will be indestructible by rats from the inside of said pipes, and that will not be melted by pouring the leaden calking.

The nature of the invention consists in a lead nipple, having an interior iron nipple around which it is cast or pressed, and an exterior metallic guard-plate designed to receive the melted lead, and to protect the leaden nipple therefrom, as will be hereinafter more fully set forth.

In the accompanying drawings, the letter A designates an iron sewer-pipe, having at one end an enlarged mouth, *a*, designed to receive one end of a coupling or nipple, B, which, from the impossibility of soldering a lead pipe to an iron one, is usually of lead, and consequently exposed to be cut through by rats from the inside. This danger is obviated by an iron tube, *b*, around which is cast or pressed the leaden coating *c*, forming an air and water tight joint therewith. Should the rats cut through the leaden coating *c* from the outside the iron tube will still remain intact, and, being rat-proof from the inside, the escape of deleterious sewer-gases into a building is effectually prevented under all circumstances. The nipple is secured to the sewer-pipe, the former being first inserted into the latter by filling the space between them with melted lead. This is done by filling the outer portion of this space with putty or other analogous material, leaving at the up side an opening to admit the melted lead. This lead falls upon the pipe-coupling nipple, and is apt at the moment of contact to melt it through to the iron lining. To prevent this an iron plate, *d*, is bolted or riveted to the nipple at the point where the melted lead strikes the same, and by its interposition effectually secures the desired result.

What I claim as new, and desire to secure by Letters Patent, is—

1. The coupling-nipple for iron, copper, lead, and other metallic pipes, consisting of an iron tube having a leaden coating pressed or cast thereon, and protected from the melted lead used in calking by a guard-plate, substantially as specified.

2. The nipple B, consisting of a metal tube, *b*, and a leaden exterior coating, *c*, pressed or cast around the same, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES MOREY HANDOVER.

Witnesses:

JOHN WEEKS,

D. MCNAMARA.