No. 769,380. PATENTED SEPT. 6, 1904.

A. H. HICKS.

PIPE COUPLING, CLOSING DEVICE, AND DRAIN ATTACHMENT.

APPLICATION FILED FEB. 9, 1904.

NO MODEL.

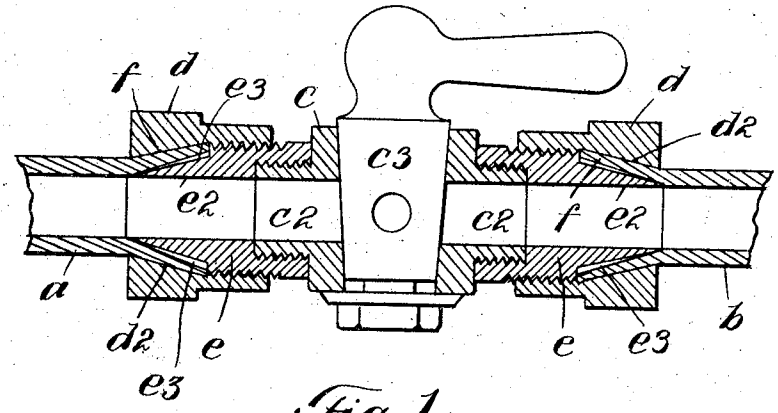


Fig. 1.

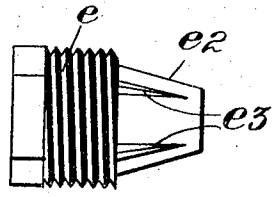


Fig. 2.

WITNESSES

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No. 769,380. Patented September 6, 1904.

UNITED STATES PATENT OFFICE.

ALBERT HENRY HICKS, OF JERSEY CITY, NEW JERSEY.

PIPE-COUPLING, CLOSING DEVICE, AND DRAIN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 769,380, dated September 6, 1904.

Application filed February 9, 1904. Serial No. 192,734. (No model.)

To all whom it may concern:

Be it known that I, ALBERT HENRY HICKS, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Pipe-Couplings, Closing Devices, and Drain Attachments, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to pipe-couplings designed particularly for use in coupling lead pipes; and the object thereof is to provide a device of this class which may be lengthened when desired, so as to provide for the necessity of cutting off the end of a pipe in case the latter becomes fractured or bursted; and with this and other objects in view the invention consists in a pipe-coupling of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a longitudinal sectional view of my improved coupling, and Fig. 2 a side view of a detail thereof.

In the drawings forming part of this specification I have shown at *a* and *b*, reference being made to Fig. 1, two sections of lead pipe to be coupled or connected, and in the practice of my invention I provide a coupling device comprising a central tubular member *c*, having screw-threaded end extensions c^2, and in the form of construction shown the central tubular member *c* is provided with a transverse valve c^3. Each of the end extensions c^2 of the central tubular member *c* is provided with a detachable tubular supplemental member *e*, adapted to be screwed onto the end extension c^2, and connected with each of the members *e* is a cap-nut *d*, the outer end openings of which are conical in form, as shown at d^2. The outer ends of the members *e* are also conical in form, as shown at e^2, and provided with pointed, sharpened, and longitudinally-arranged ribs e^3, and the cap-nuts *d* are screwed onto the members *e* in practice, as clearly shown in Fig. 1.

Whenever two sections of lead pipe are to be coupled, the cap-nuts *d* are passed onto the ends of said sections and the said ends are then expanded, or partially expanded, as shown at *f*, or partially expanded in the usual or any preferred manner, or the conical ends of the members *e* may be driven into said pipe-section for this purpose, and in this event the ribs e^3 will aid in expanding said ends of said pipe-sections, after which the members *e* are screwed onto the tubular member *c*, and the nuts *d* are then screwed into position on said members *e*, and this operation draws the lead-pipe sections into the position shown in Fig. 1 and further expands said ends, and this forms a perfectly-tight coupling, and in the operation of screwing the cap-nuts *d* into position the pipe-sections are prevented from turning by the ribs e^3 on the conical end portions e^2 of the members *e*.

The members *e* may be made of different lengths and a variety thereof may be kept in stock, and if at any time the pipe-sections or one of them be burst at the end or the end thereof become split or said end be injured in any way and it is necessary to cut the end of the pipe-section off this may be done and a longer member *e* inserted, and the coupling may be again completed, and this operation may be repeated whenever necessary, and the members *e* may be so formed that a number thereof may be employed at each end of the central tubular member *c*.

Either end of the central tubular member *c* may be provided with the parts *d* and *e*, as shown in Fig. 1, or one end of the central tubular member *c* may be closed and the other provided with the parts *d* and *e*, and the valve c^3 may or may not be employed, the object thereof being to cut off the flow through the coupling when desired and to divert it when necessary in a lateral direction, or said valve may be used for drainage purposes.

My improved pipe-coupling device is simple in construction and operation and perfectly adapted to accomplish the result for

which it is intended, and the same may be used wherever devices of this class are required.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A pipe-coupling device, comprising a main or central member having screw-threaded end extensions and conical portions projecting therefrom between which and the screw-threaded parts is an annular shoulder, said conical portions being provided with longitudinally-arranged, pointed and sharpened ribs, and cap-nuts adapted to be screwed onto the said end extensions and the interior of the outer ends of which are conical in form, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 6th day of February, 1904.

ALBERT HENRY HICKS.

Witnesses:
F. A. STEWART,
C. J. KLEIN.