

C. A. BORGESON.
 COUPLING.
 APPLICATION FILED JAN. 20, 1920.

1,375,822.

Patented Apr. 26, 1921.

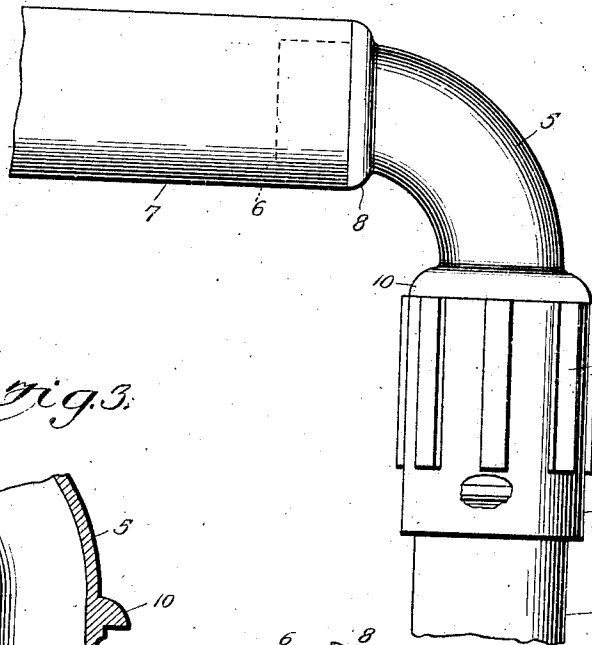


Fig. 1.

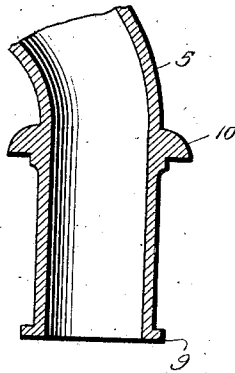


Fig. 3.

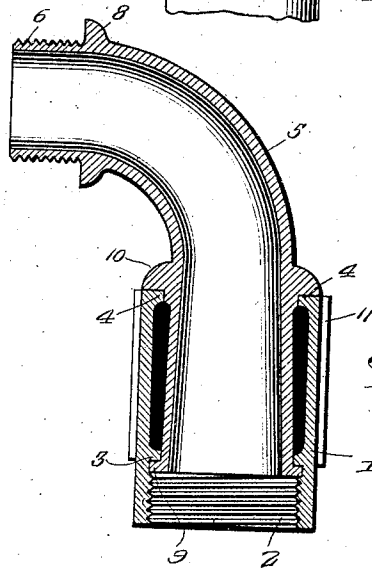


Fig. 2.

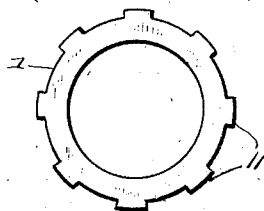


Fig. 4.

Witnesses

J. H. Crawford
O. E. Trainor

Inventor
C. A. Borgeson,

By

Wm. H. Co.

Attorney

UNITED STATES PATENT OFFICE.

CHARLES AUGUST BORGESON, OF SAN FRANCISCO, CALIFORNIA.

COUPLING.

1,375,822.

Specification of Letters Patent.

Patented Apr. 26, 1921.

Application filed January 20, 1920. Serial No. 352,684.

To all whom it may concern:

Be it known that I, CHARLES A. BORGESON, a citizen of the United States, and a resident of San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Couplings, of which the following is a specification.

My invention is an improvement in couplings, and has for its object to provide a device of the character specified, especially adapted for connecting hose to box hydrants, the arrangement being such that the usual bend in the hose where it leaves the water pipe will be eliminated, and wherein the hose may be freely rotated about the hydrant.

In the drawings:—

Figure 1 is a side view of the improved coupling.

Fig. 2 is an enlarged section,

Fig. 3 is a sectional detail of the inner section,

Fig. 4 is an end view of the outer section.

As is known, box hydrants such as are used in parks, golf links, and in like places, are set flush with the surface of the ground, the connection being within the box and below the surface. The hose is connected in such manner that that portion adjacent to the hydrant has its axis vertical, and when the hose is empty, it bends over, weakening the hose and quickly causing a break at the bend.

In addition, the coupling not being within the box is difficult of access, and it is a troublesome matter to connect or disconnect a hose. The present invention is designed to overcome this difficulty to provide an easy connection, and to prevent bending of the hose.

In the present embodiment of the invention, the improved coupling comprises a tubular section 1, which is connected with the water pipe by means of an internal thread 2. Just above the thread which extends but a short distance into the section, there is provided an inwardly extending rib 3, and there is a space between the rib and the thread as shown.

At its upper end the section 1 has a similar inwardly extending rib 4. The other section 5 has an elbow, having at one end an external thread 6 for engagement by the hose 7, and provided with an annular shoulder or ledge 8 for limiting the movement of the hose on the elbow. At its opposite end the section 5 has an outwardly extending rib or flange 9, which is adapted to engage beneath the rib 3 to lock the parts rotatably together. The section 5 also has an annular rib 10 spaced inwardly from the rib 9, and adapted to engage the end of the section 1 when the sections are connected.

The outer face of the rib 10 is rabbeted as shown to fit the end of the section 1, and the sections are connected in the following manner. Before insertion, that end of the section 5 remote from the hose is substantially cylindrical, and as shown in Fig. 3, a rib 9 may be inserted past the rib 3. After the sections have been engaged as shown in Fig. 2, the ends of the section 5 adjacent the rib 9 is expanded as shown in Fig. 2, until the rib 9 engages beneath the rib 3 and locks the parts together, and in such manner that they may be rotated with respect to each other.

Referring to Figs. 1 and 2, it will be seen that the section 1 has longitudinally extending external ribs 11 which provide gripping means for placing the section, when it is engaged with the water pipe 12. In the use of the improved coupling, the hose is connected with the threaded nipple 6, and the utmost freedom of the hose is permitted about the box. If desired, a packing may be arranged between the section in the space between the ribs 3 and 4.

I claim:—

A coupling comprising sections having interengaging means for rotatably and permanently connecting them, one of the sections being adapted to fit within the other and having means for limiting its inward movement, said sections having interengaging means normally out of engaging position and adapted to be brought into engaging position by the expansion of the inner section, said interengaging means compris-

ing an external rib on the first named section at the inner end thereof, and an internal rib on the last named section, said rib being spaced from the limiting means of
5 the first named section to be positioned on the opposite side of the internal rib from the limiting means when the limiting means

is in engagement with the last named section so that when the first named section is expanded the ribs will interengage to prevent disengagement of the sections to rotatably connect them. 10

CHARLES AUGUST BORGESON.