CHARLES E. HARTWIG'S MPT IN HOSE COUPLING Treg. 1 PATENTED FEB 11 1868 74219 Charles F Hantung 7722.7205505. . Inventor Byling Attorney

Anited States Patent Pffice.

CHARLES F. HARTWIG, OF WEST HAVEN, CONNECTICUT, ASSIGNOR TO HIMSELF AND GEORGE R. KELSEY, OF SAME PLACE.

Letters Patent No. 74,219, dated February 11, 1868.

IMPROVEMENT IN HOSE-COUPLINGS.

The Schedule referred to in these Petters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Charles F. Hartwig, of West Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Hose-Coupling; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thoreon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view.

Figure 2, an end view of one part.

Figure 3, an end view of the other part; and in

Figure 4, a longitudinal section of the whole.

This invention relates to an improvement in coupling for connecting lengths of hose, or for similar purposes. To enable others to construct this improvement, I will proceed to described the same, as illustrated in the accompanying drawings.

A is the one part, and B the other part, to each of which one end of the length of hose or thing to be coupled is attached. Around the part B is formed a flange, C, and a neck, D, projecting inward from the said flange, as seen in fig. 4, and on the said neck are formed two or more lips, a, as seen in figs. 3 and 4, the said lips being less in length than the space between. Upon the inner end of the part A is formed a flange, d, and back of the said flange a screw-thread is cut, as denoted in fig. 4, and over the thread thus cut is placed a ring, E, having a corresponding thread, so that the said ring may be freely turned to or from the flange d. The ring E has an internal annular groove, e, and into the groove are cut notches, F, corresponding in position to the lips a, as seen in fig., 2, and so to admit of the said lips passing freely into the groove e, as seen in fig. 4, and when so passed into the groove, may be turned to the right or left, so as to hold the part B within the ring E. On to the part A is securely and firmly fixed a ring, G, having a flange, H, projecting over the ring E, as seen in fig. 4, and yet not so as to interfere with the movement of the ring E, and the ring G is provided with holes f, or other means for turning the part A. Within the ring E, and on to the flange d, is placed a packing, b, of rubber or other suitable material. The part B is inserted within the ring E, as before described and shown in fig. 4; then, holding the part B, the part A is turned into the ring E, the ring E being held stationary within the part B until the flange d, on the part A, bears hard against the end D of the part B, the packing being between, and thus the two parts are firmly secured together, and the joint tightly packed.

To separate the parts, reverse the movement of the part A, to draw it back from the end of the part B, then the ring E may be easily turned to permit the part A to be removed therefrom. The flange H protects the screw from being obstructed by sand or any foreign substance.

It will be seen that but a partial turn of the part A will be sufficient to relieve the part B, so that the ring E may be turned to separate the two parts. Thus I have produced a coupling which may be adjusted very quickly, and very cheap and simple in its construction.

I do not wish to be understood as broadly claiming the arrangement of the flange H, so as to prevent the admission of sand to the screw.

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

The arrangement of the ring G, provided with its flange H, upon the part A, in combination with the ring E, constructed so as to operate substantially as set forth.

CHARLES F. HARTWIG.

Witnesses:

John E. Earle,

A. J. TIBBITS.