

No. 749,496.

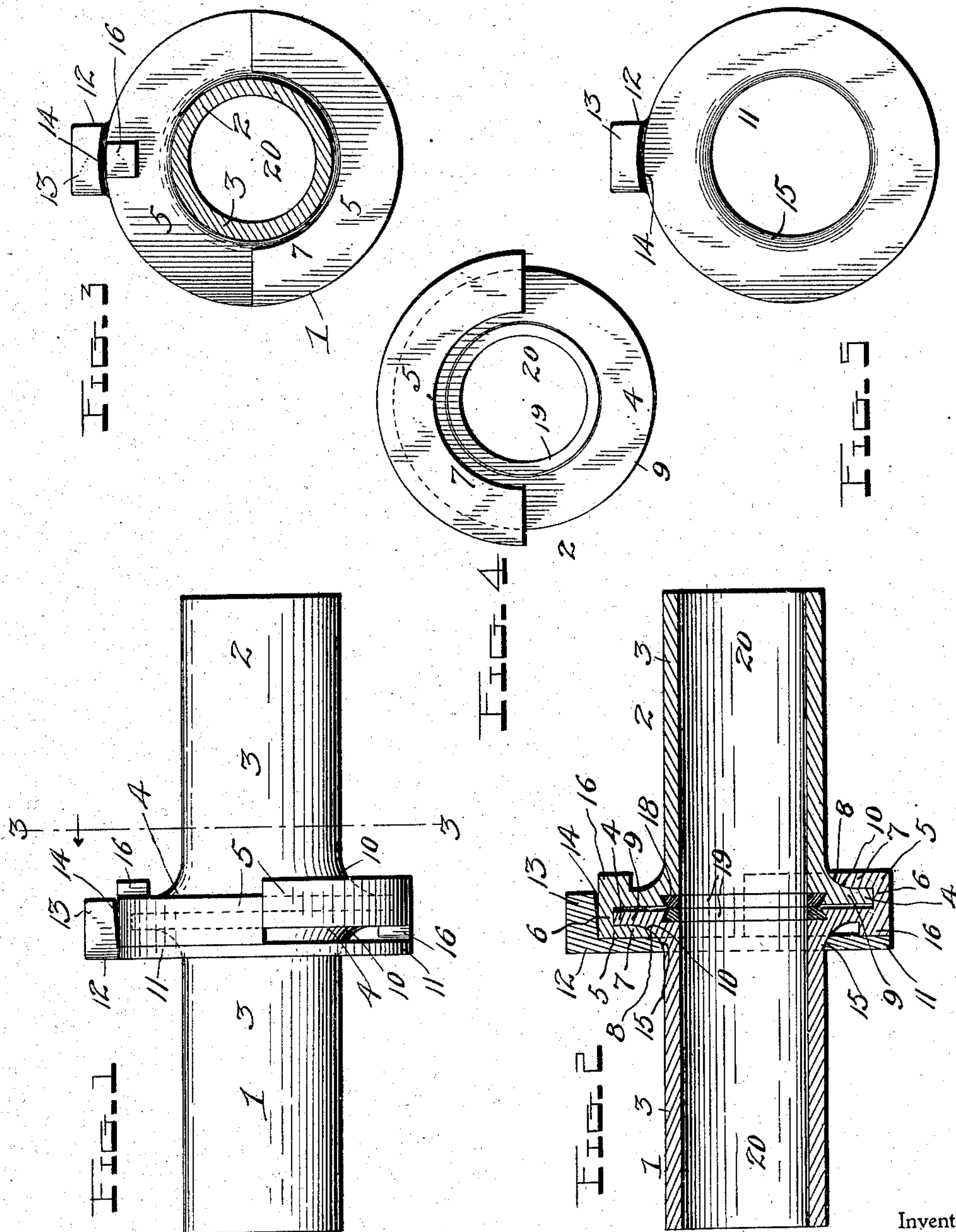
PATENTED JAN. 12, 1904.

HENRY S. PATTERSON & HERBERT S. PATTERSON.

HOSE COUPLING.

APPLICATION FILED SEPT. 28, 1903.

NO MODEL.



Witnesses

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## UNITED STATES PATENT OFFICE.

HENRY STANLEY PATTERSON, OF RAVENNA, OHIO, AND HERBERT STEWARD PATTERSON, OF SCENERY HILL, PENNSYLVANIA.

## HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 749,496, dated January 12, 1904.

Application filed September 28, 1903. Serial No. 174,940. (No model.)

*To all whom it may concern:*

Be it known that we, HENRY STANLEY PATTERSON, residing at Ravenna, in the county of Portage, State of Ohio, and HERBERT STEWARD PATTERSON, residing at Scenery Hill, in the county of Washington and State of Pennsylvania, citizens of the United States, have invented certain new and useful Improvements in Hose-Couplings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in couplings for hose, pipes, water-plugs, and the like.

The object of the invention is to provide a simple, durable, and inexpensive device of this character which may be easily and quickly coupled or uncoupled and in which the coupling members are interchangeable.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a side elevation of our improved coupling, showing the same locked. Fig. 2 is a longitudinal sectional view through the same. Fig. 3 is a transverse sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a detail view of one of the coupling members. Fig. 5 is a detail view of the locking-ring.

Referring to the drawings by numerals, 1 and 2 denote two coupling members which are identical in construction, each comprising a tubular body portion 3, having at one end an annular coupling-flange 4, which is formed with a segmental receiving-socket 5. Said socket 5 is preferably semicircular in shape, being formed upon the outer face of one-half of the coupling-flange 4 by providing a semi-annular spacing-web 6 and an inwardly-projecting semi-annular flange 7, having its inner edge beveled, as at 8. The said sockets 5 are slightly larger in size than the free portions 9 of the coupling-flanges 4, so that said semi-

circular portion 9 of the coupling-flange on each member will fit snugly into the receiving-socket 5 of the other member, as clearly shown in Fig. 2. The beveled portions 8 of the socket-flanges 7 frictionally engage the curved portions 10 on the outer faces of the coupling-flanges 4 to prevent any looseness between the two coupling members. In order to hold or fasten the two members together in their coupled position, a locking device 11 is provided. Said device consists of a ring adapted to fit upon one of the coupling members and provided with a radial projection 12, having a lug 13 formed thereon and projecting at right angles to the same. Said lug 13 has its under or inner face beveled, as at 14, to frictionally engage the outer edge of the receiving-socket on the opposite coupling member, as shown in Figs. 1 and 2. The locking-ring is thus held upon coupling members by friction and effectively prevents their separation, as will be readily understood. In order to hold the locking-ring more firmly in position, the inner face or edge of its annular center opening is beveled, as at 15, to frictionally engage the curved portion 10 of the coupling member upon which it is placed. A stop 16 is provided on the outer face of each flange 4 at the rear of its socket portion in order to limit the movement of the locking-ring.

In order to effect an air and water tight connection between the two coupling members, the contacting faces of the coupling-flanges 4 are formed with annular grooves 18, in which rubber washers or packing-rings 19 are seated. Said rings or gaskets 19 surround the alining bores 20 of the two members and project slightly beyond the contacting faces of the flanges, so that a tight connection will be provided between the two members.

The outer ends of the tubular body portion 3 of the two coupling members may be provided with any suitable attaching means, since the coupling may be used for various purposes.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and ad-



5 advantages of the invention will be readily understood. It will be observed that a straight connection is thus provided which may be very quickly coupled and uncoupled, and since the two members are identical in construction they are interchangeable and reversible.

10 Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

15 A coupling of the class described comprising a pair of tubular members, each having at one end an annular coupling-flange, and a semi-annular coupling-flange spaced from the face thereof to form a semi-annular socket between  
20 them, the free portion of the annular flange of each member being engaged with the socket

of the other, and a locking-ring on one of the tubular members, to bear against the outer side of the semi-annular flange of one member and having a laterally-projecting wedge-lug to frictionally engage the periphery of the coupling-flange of the other member, and retain said coupling members and the locking-ring in place. 25

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses. 30

HENRY STANLEY PATTERSON.

HERBERT STEWARD PATTERSON.

Witnesses as to signature of Henry S. Patterson:

E. L. PHELPS,

TOM. H. REYNOLDS.

Witnesses as to signature of Herbert S. Patterson:

ARDO. MILLER,

ALBERT SNYDER.