

No. 763,210.

PATENTED JUNE 21, 1904.

E. SCHWAMBERGER & J. THOMSON.

HOSE COUPLING.

APPLICATION FILED AUG. 11, 1903.

NO MODEL.

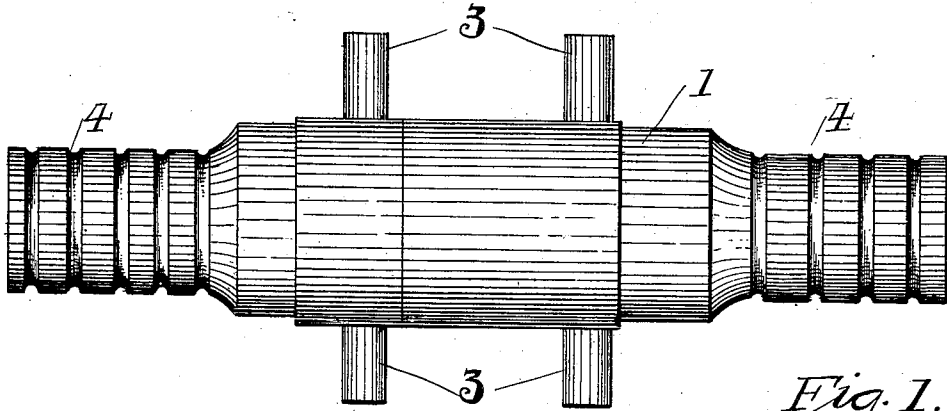


Fig. 1.

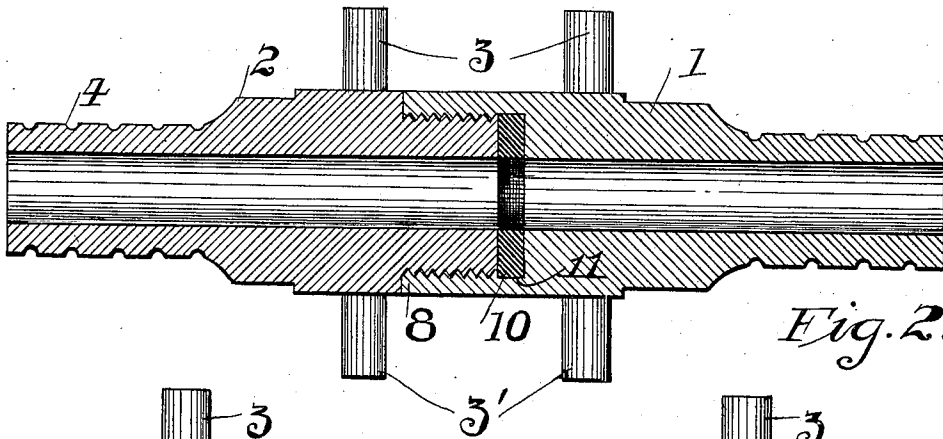


Fig. 2.

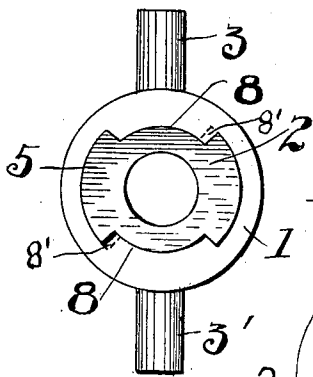


Fig. 3.

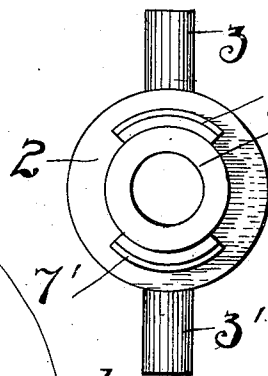


Fig. 4.

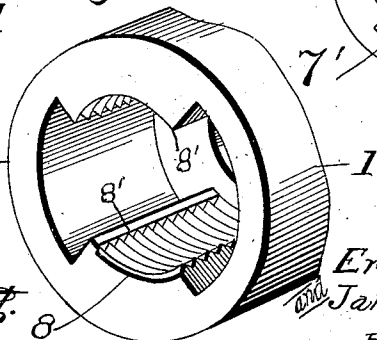


Fig. 5.

Witnesses;

H. H. Clement

N. C. Pritchett

Inventors
Ernest Schwamberger
and James Thomson.

By *[Signature]*
Attorneys.

UNITED STATES PATENT OFFICE.

ERNEST SCHWAMBERGER AND JAMES THOMSON, OF PITTSBURG,
PENNSYLVANIA.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 763,210, dated June 21, 1904.

Application filed August 11, 1903. Serial No. 169,098. (No model.)

To all whom it may concern:

Be it known that we, ERNEST SCHWAMBERGER and JAMES THOMSON, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Hose-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in hose-couplers, and has for its object to construct a coupler of this type in which the two sections or members constituting the coupler may be quickly, easily, and effectively joined.

Briefly described, the invention comprises a male and a female member, each of which has discontinuous threads that interlock when the members of the coupler are in one position, and when given one quarter-turn the threads are disengaged from each other, whereby the members may be uncoupled. Means is provided for assuring an absolutely tight joint, and other features of construction enter into the invention and will be hereinafter more specifically described and then particularly pointed out in the appended claim, and in describing the invention in detail reference will be had to the accompanying drawings, forming a part of this application, and wherein like numerals of reference will be employed for designating like parts throughout the different views of the drawings, in which—

Figure 1 is a plan view showing the members in the coupled position. Fig. 2 is a horizontal sectional view. Fig. 3 is an end view of the female member of the coupling. Fig. 4 is a like view of the male member; and Fig. 5 is a perspective view of one end of the female member, showing on the interior the uncut portions of the threads thereof.

To put our invention into practice, we provide two members—namely, a female member 1 and a male member 2—each of which is provided with oppositely-disposed pins or studs 3 3' to afford a means for turning the members more readily, so as to effect the in-

terlocked engagement of the members, these pins or studs being engaged, if necessary, by a spanner or other suitable device. The members are also each provided with the corrugated or otherwise roughened nipples or extensions 4 4, to which the flexible hose (not shown) is adapted to be effectively secured in any desired manner. The female member is provided in its engaging end with a recess 5 to receive the extension 6 on the engaging end of the male member, the said extension being provided on opposite sides with segment-shaped teeth 7, adapted to interlock with similarly-shaped teeth 8 on opposite sides of the opening 5 in the female member. The bores 9 through the members are of course of the same diameter, and against the annular seat 10 in the female member is placed a flexible gasket 11, adapted to be engaged by the inner end of the extension 6. To couple the members, the segment-shaped threads 7 are placed in the cut-away portions 12 of the female member, and one or the other of the members are then given one quarter-turn, which will bring threads 7 into engagement with threads 8, interlocking the two sets of threads, so as to secure the two members in the interlocked position. These segment-shaped or discontinuous threads are so made that the threads will interlock when the members are turned in one direction, and as soon as the threads are in full mesh further rotation in the same direction is prevented, due to the uncut part of the thread, as at 8' in Fig. 5. In this connection the studs or pins 3 are so placed on the members as to indicate when the members are properly positioned to permit the interlocking of the threads, and then the spanner or wrench being applied pulls the tapered threads into firm engagement and holding the members in the interlocked position. It will be observed by reference to Fig. 2 that when the threads are meshed or interlocked they cannot be turned farther in the same direction, so as to disengage, for the reason that the thread adjacent to the annular seat 10 is uncut, and the threads being spiral they lock as soon as they come in full mesh and prevent further turning of the member in

the one direction. It will be observed in this connection that the washer or gasket being seated between the threads 8 and the annular seat 10 is held against displacement as the members are uncoupled.

The pins 3 are made of a greater length than the pin 3', and thus act as a guide for the operator, as the members are so placed in position that the pins 3 come opposite each other as do the pins 3'.

While we have herein shown and described the invention in detail as it is practiced by us, yet it will be observed that various changes may be made in the details of construction without departing from the general spirit of our invention.

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

20 A hose-coupling comprising a male and a female member, said female member having a recess in its engaging end and having a single

pair of oppositely-disposed segment-shaped threaded portions each formed with an uncut part, said threads terminating at a point adjacent the inner end or wall of said recess, a gasket seating between the termination of said threads and the end wall of said recess, said male member having a single pair of oppositely-disposed segment-shaped threaded portions engaging said threads of the female member, said threaded portions of the male member being locked against movement when in position by engagement with said uncut-away portions of the female threads, said gasket extending to the bore of the members and engaging the entire end of the male member.

In testimony whereof we affix our signatures in the presence of two witnesses.

ERNEST SCHWAMBERGER.
JAMES THOMSON.

Witnesses:

A. M. WILSON,
E. E. POTTER.