

No. 747,360.

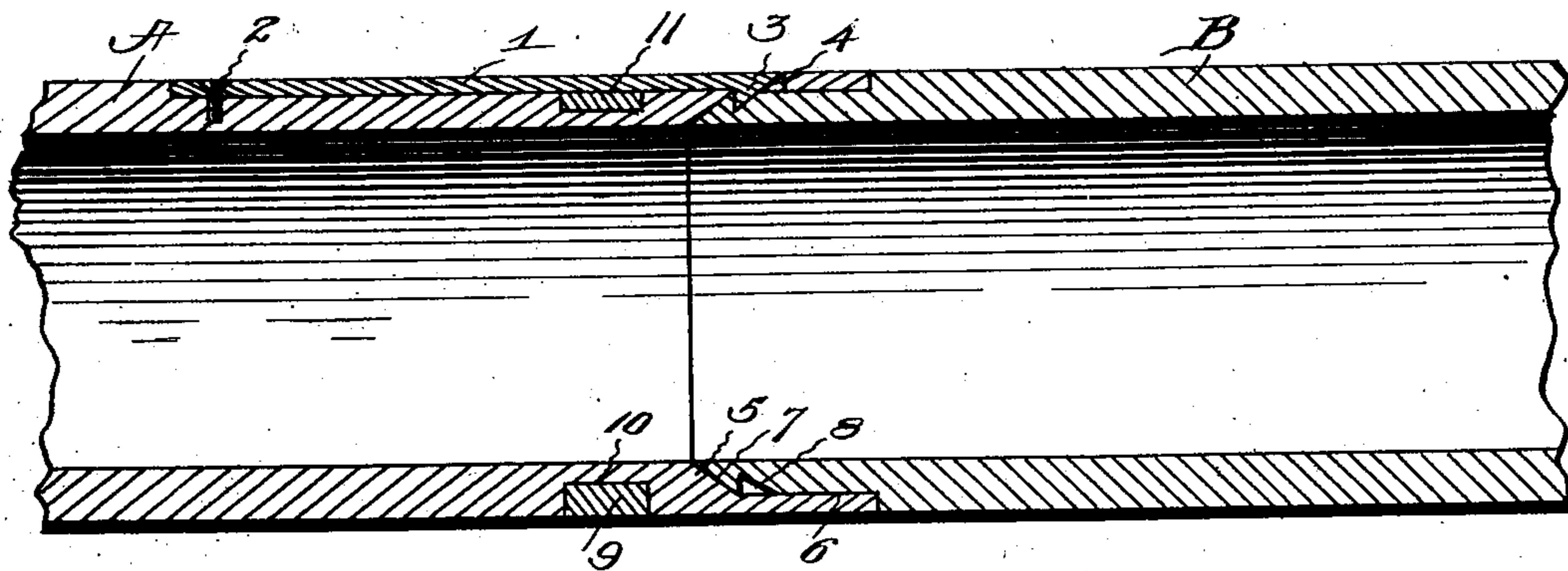
PATENTED DEC. 22, 1903.

H. G. BARRY.  
HOSE COUPLING.

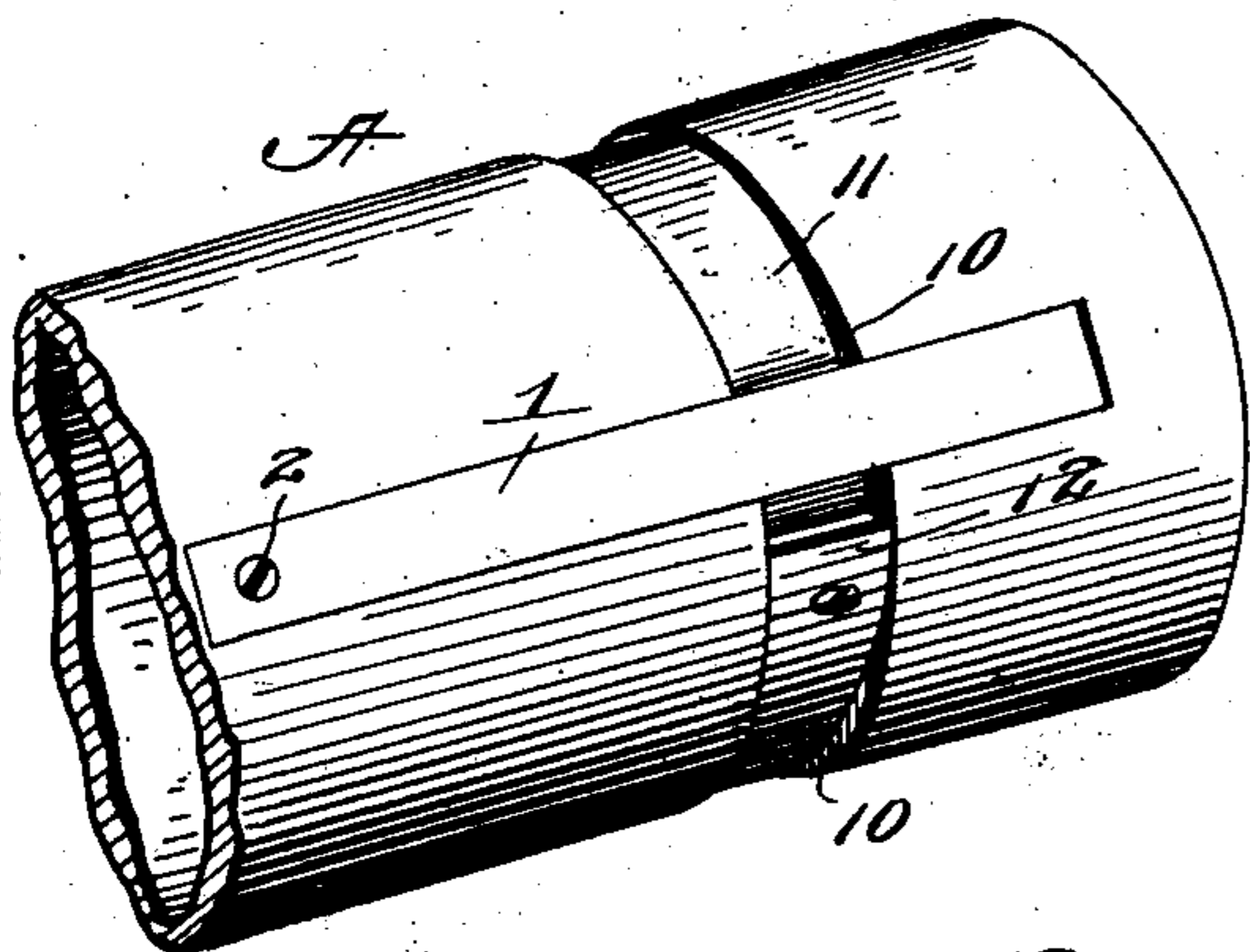
APPLICATION FILED SEPT. 24, 1903.

NO MODEL.

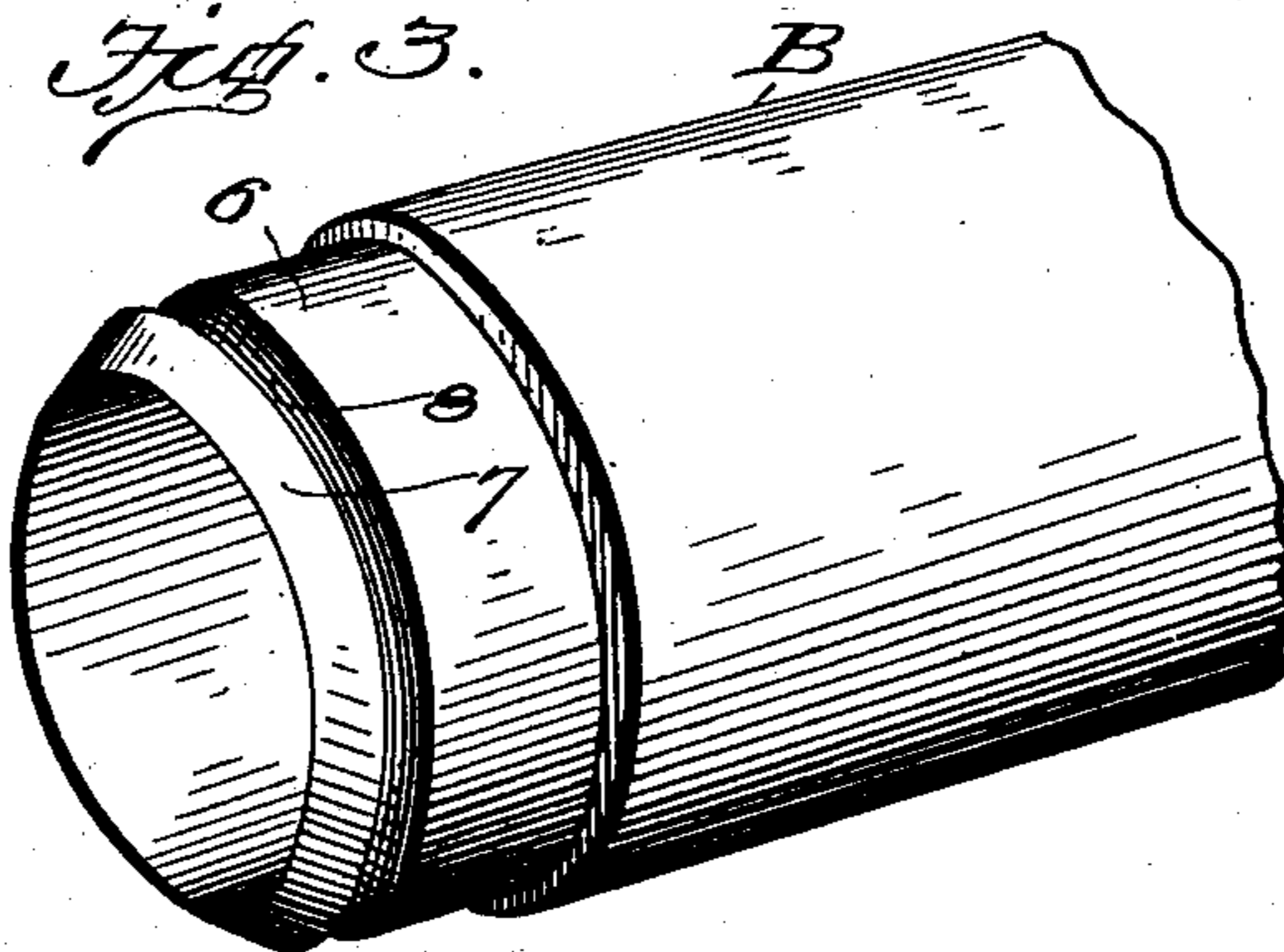
*Fig. 1*



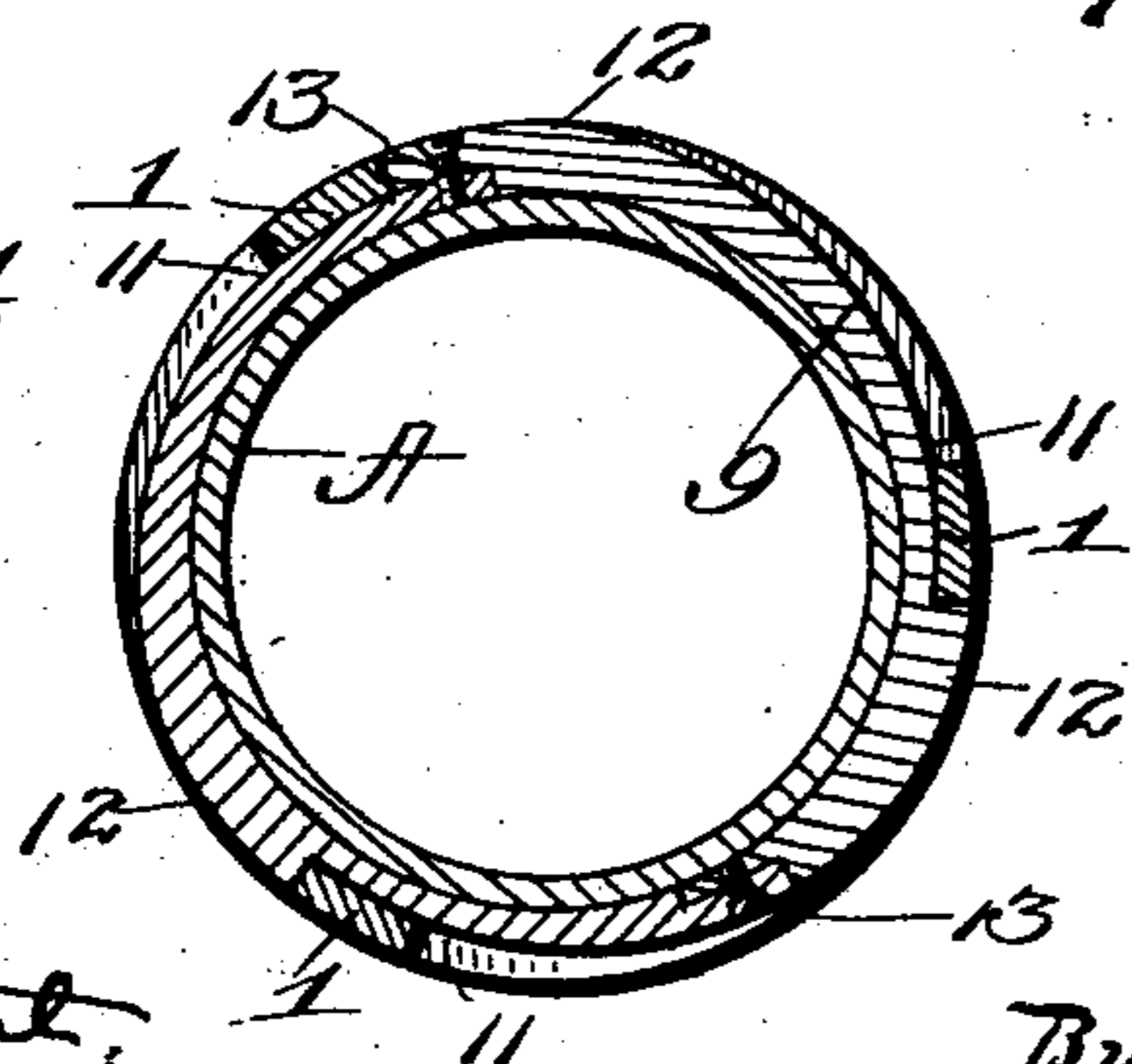
*Fig. 2.*



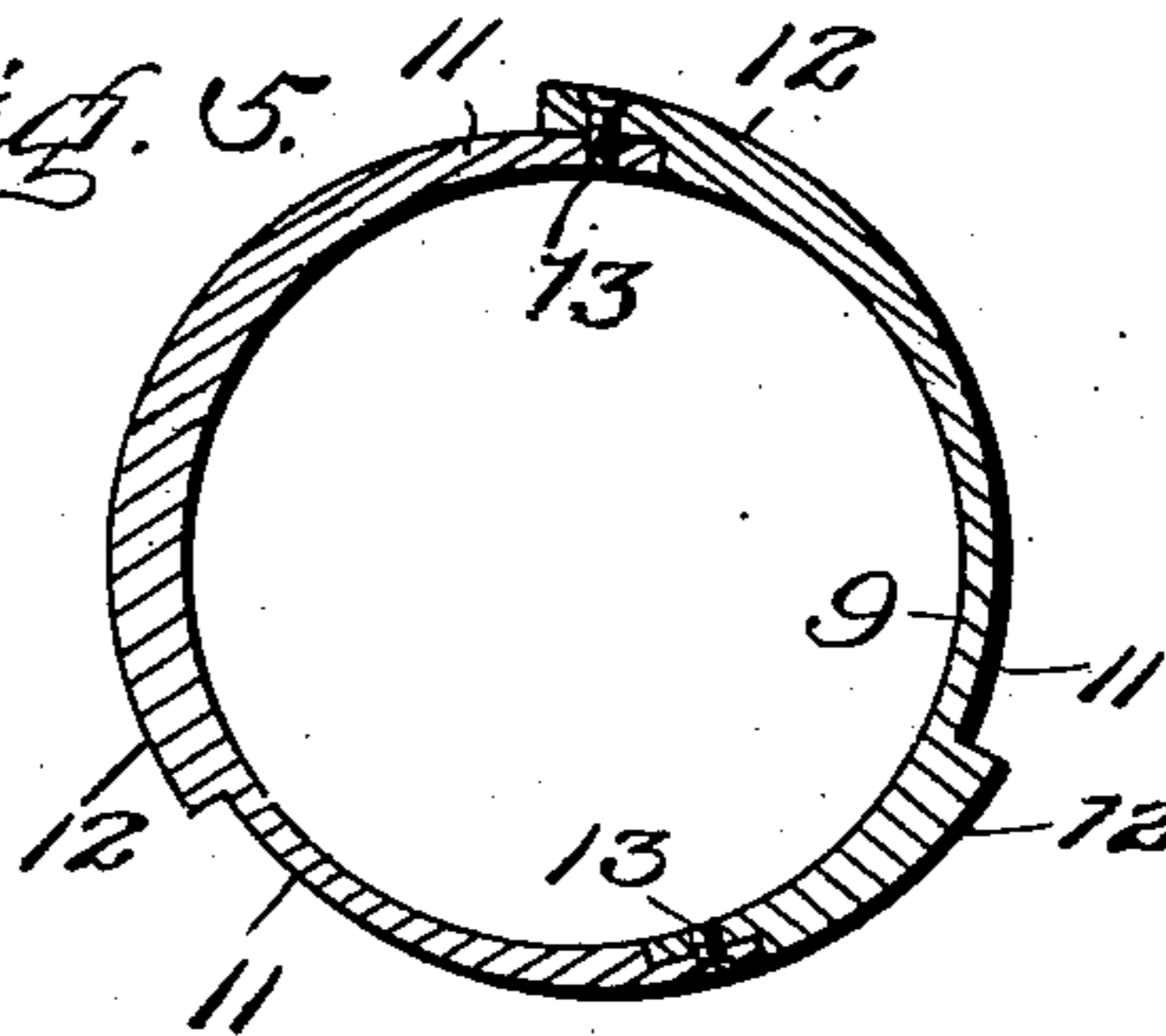
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses  
*E. E. Hunt*  
*L. O. Nelson*

Inventor  
*H. G. Barry*  
By *J. E. Wilson*  
Attorney

# UNITED STATES PATENT OFFICE.

HARRY G. BARRY, OF PONTIAC, MICHIGAN.

## HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 747,360, dated December 22, 1903.

Application filed September 24, 1903. Serial No. 174,456. (No model.)

*To all whom it may concern:*

Be it known that I, HARRY G. BARRY, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented new and useful Improvements in Hose-Couplings, of which the following is a specification.

This invention relates to certain new and useful improvements in hose-couplings. Its object is to provide a hose-coupling which is simple of construction, inexpensive of production, durable in use, and whose parts are adapted to couple perfectly water-tight and to be quickly and conveniently coupled and uncoupled.

In the accompanying drawings, Figure 1 is a longitudinal section of a hose-coupling embodying my invention, showing the parts or members coupled. Figs. 2 and 3 are detail perspective views of the members separated. Fig. 4 is a cross-section on line 4-4 of Fig. 1, and Fig. 5 is a detail view of the releasing-ring.

Referring now more particularly to the drawings, A and B represent two parts of a coupling, which may be secured to the meeting ends of hose-sections in any preferred way.

The coupling member A is tubular in form and is provided with a series of locking-jaws 1, three of such jaws equidistantly arranged being shown in the present instance. Each jaw consists of a spring-metal strip extending longitudinally upon the outer side of the member A and secured at its inner end thereto by a suitable fastening 2. The outer or free end of the strip is provided with a locking projection 3, extending inwardly and adapted to move within an opening 4 in the section A. The resiliency of the spring-metal strip normally causes the projection 3 to extend through the opening 4 upon the interior of the member A. As shown, the openings 4 are disposed adjacent to the outer or coupling end of the member A and are formed in a reduced portion thereof, the wall of said member at the rear of said reduced portion being beveled off to form a contact-shoulder 5.

The member B of the coupling has a reduced end 6 to fit within the reduced portion of the member A, the extremity of which end 6 is shaped to form a beveled portion 7, which is adapted to engage and project the projec-

tions 3 of the dogs 1 and to abut against the beveled surface 5 to form a perfectly water-tight connection when the members are coupled together. In rear of said beveled surface 7 an annular groove 8 is formed in the part 6, and this groove forms a keeper which is designed to receive the projections 3 of the dogs to lock the coupling members together.

In the operation of the coupling the proximal ends of the sections A and B are brought together and telescoped one within the other, and as the portion 6 of the member B enters the reduced portion of the member A the beveled surface 7 will engage and force out the projections 3 of the dogs 1, thus allowing said portion 7 to abut fully against the shoulder 5, whereupon the said projections 3 will snap into the keeper-groove 8, and thereby lock the coupling-sections together.

In order to release the coupled sections from engagement, I provide a releasing device, consisting of a ring 9, which is mounted to turn or oscillate in a groove 10 in section A below the dogs 1 at a point just in rear of the shoulder 5 and contiguous to the projections 3. This ring is tangentially recessed at equidistant points around its circumference to form alternate cam-shaped or inclined seats 11 and concentric peripheral portions 12, the latter being milled or roughened to give a secure finger grip to allow the ring to be conveniently turned or rotated. When the ring is so arranged that the seats or recesses 11 lie beneath the dogs 1, the latter are permitted to move inwardly by their spring action to the fullest extent, so as to cause the projections 3 to extend through the openings 4; but when the ring is turned or rotated in the direction of ascension of the inclined walls of said seats or recesses the latter, acting in the nature of cams or eccentrics, will force the dogs outwardly, and thus retract the projections 3, so as to allow the members of the coupling to be disconnected. As shown in the present instance, the ring is composed of sections having lapping ends which are connected by screws or like fastenings 13, this construction facilitating the application of the ring to the groove 10; but this construction may be varied as desired.

From the foregoing description, taken in connection with the accompanying drawings,

the construction and mode of operation of my hose-coupling will be readily understood, and it will be seen that it provides a coupling device which is simple of construction, efficient  
5 for its intended purpose, adapted to form a water-tight joint, and which by easy manipulation may be quickly and conveniently coupled and uncoupled.

Various changes in the form, proportion,  
10 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 described my invention, what  
15 I claim, and desire to secure by Letters Patent, is—

1. In a hose-coupling, in combination with a section having a keeper device, a section having a spring-dog to engage said keeper device,  
20 vice, an annular groove crossed by said spring-dog, and a revoluble ring in said groove having a cam to bear under the spring-dog and move the same out of engagement with the keeper device upon a partial revolution  
25 of the ring.

2. In a hose-coupling, in combination with a section having a shouldered reduced end

portion provided with a peripheral annular keeper-groove, a section having an internally-shouldered end portion to telescopically en- 30  
gage the reduced end portion of the first-mentioned section, and being further provided with openings to register with the keeper-groove, longitudinal recesses communicating with said openings, and an annular, 35  
peripheral groove intersecting said recesses, spring-dogs countersunk in said recesses, having their inner ends recessed and provided on the inner sides of their outer ends with projections to engage the keeper-groove, and a 40  
revoluble ring in said intersecting groove, having cams to bear against the inner sides of the spring-dogs and move their free ends outwardly, to disengage their projections from the keeper-groove upon a partial revolution 45  
of said ring in one direction.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY G. BARRY.

Witnesses:

A. F. NEWBURY,

A. W. DICKINSON.