

No. 803,128.

PATENTED OCT. 31, 1905.

C. T. PALMER.
HOSE COUPLING.

APPLICATION FILED JAN. 31, 1905.

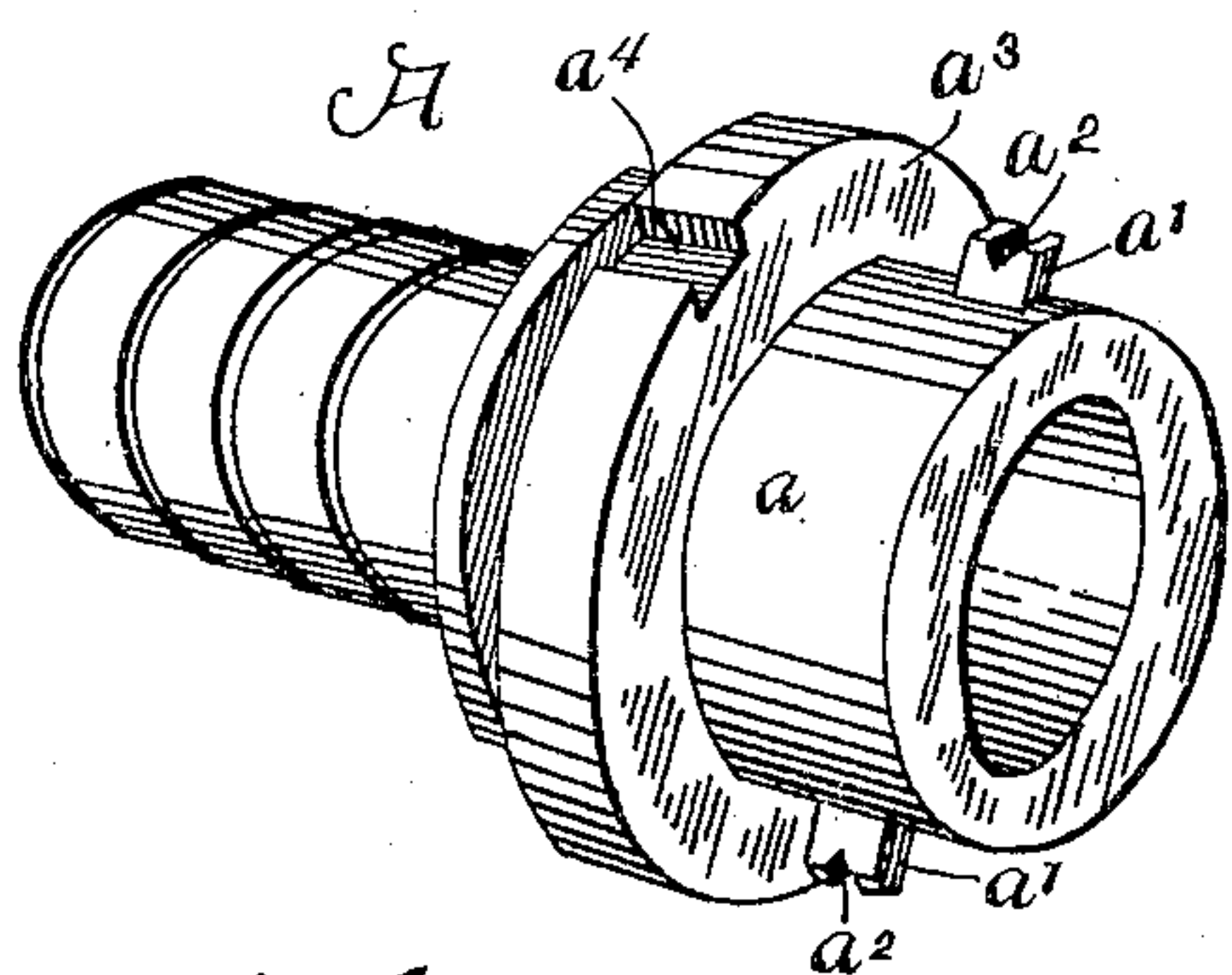


Fig. 1

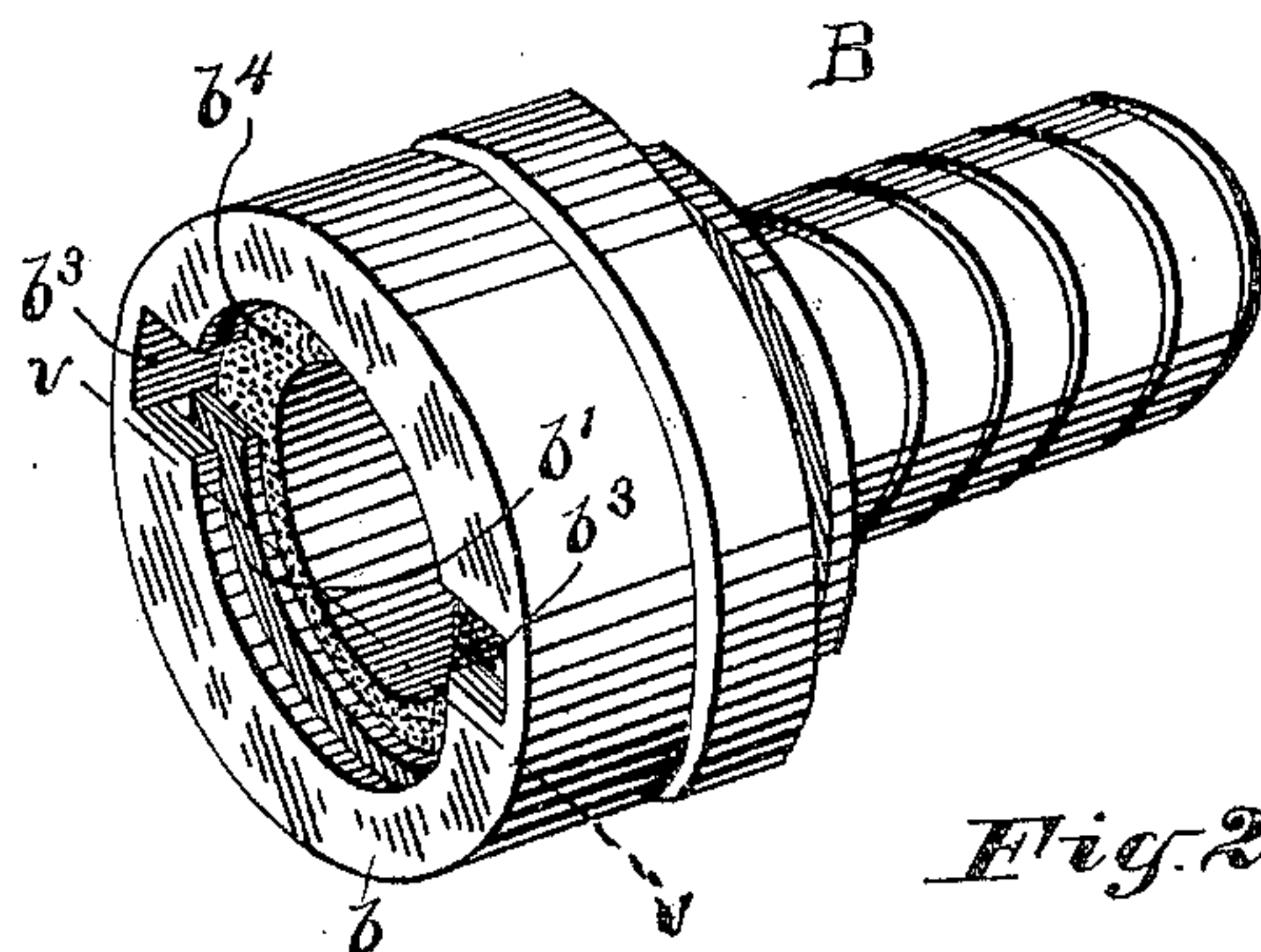


Fig. 2

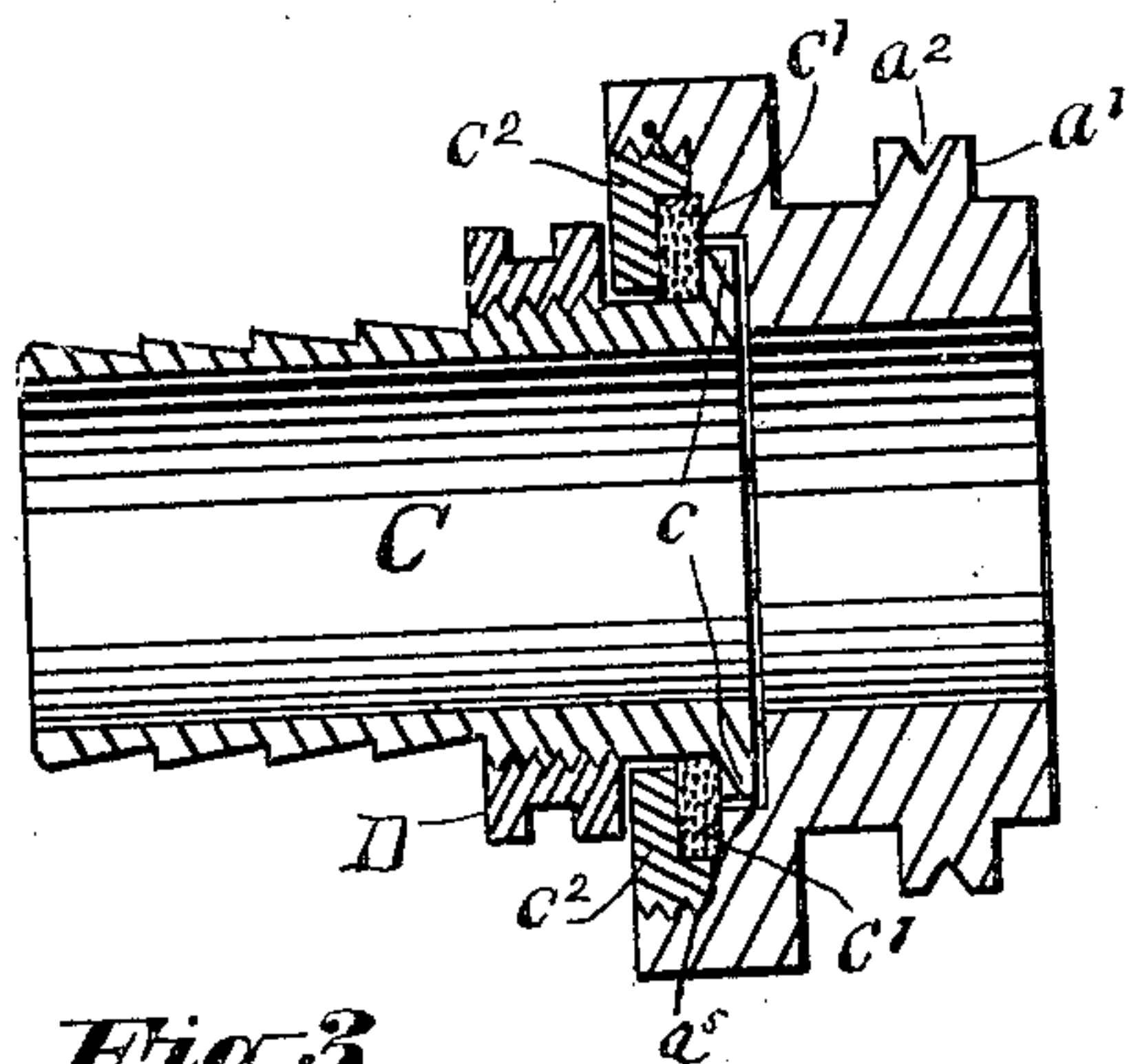


Fig. 3

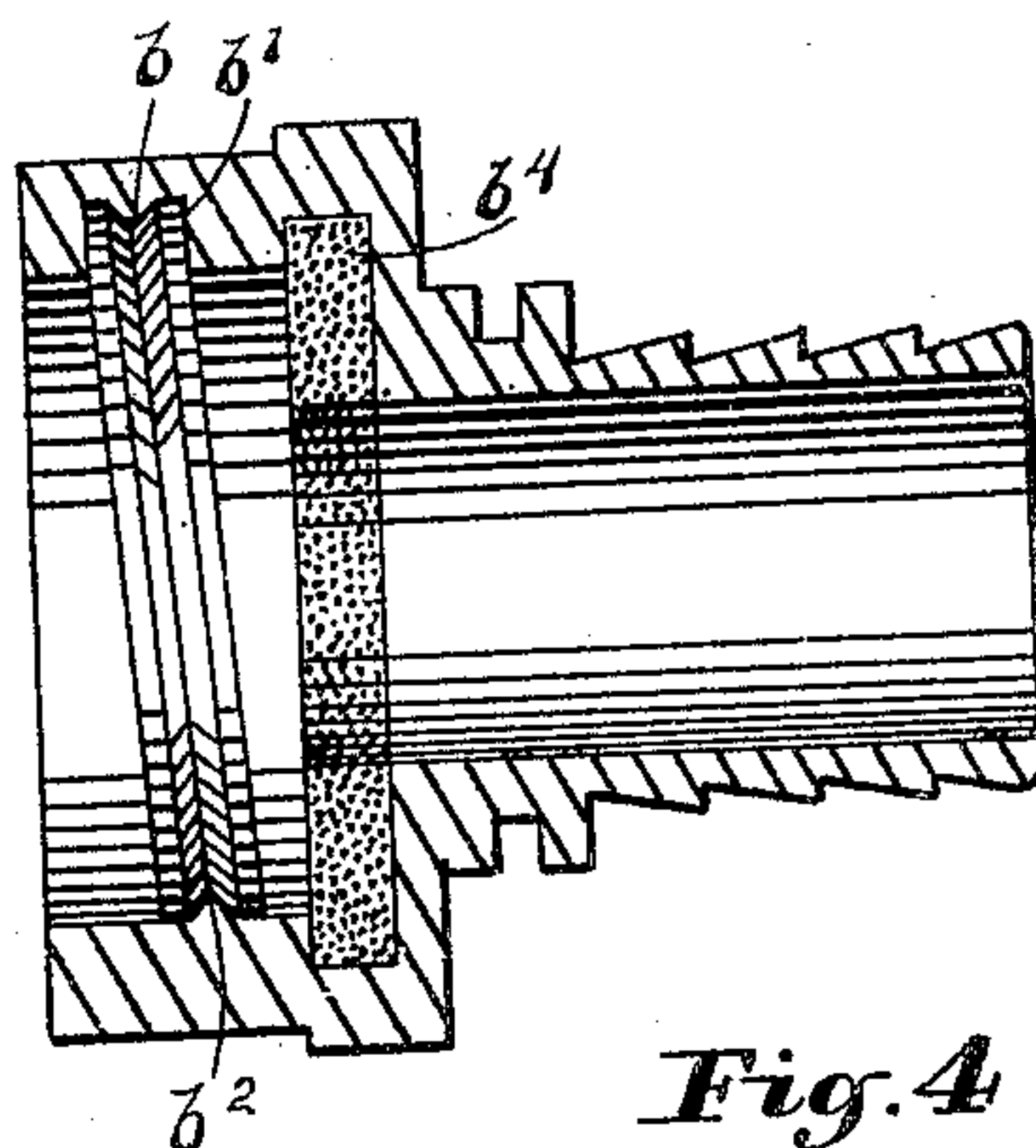


Fig. 4

Witnesses;

C. C. Clark
A. L. Van Dineygen

Inventor

Charles T. Palmer

per J. D. Clark
Attorney

UNITED STATES PATENT OFFICE.

CHARLES T. PALMER, OF CHICAGO, ILLINOIS.

HOSE-COUPLING.

No. 803,128.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed January 31, 1905. Serial No. 243,471.

To all whom it may concern:

Be it known that I, CHARLES T. PALMER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hose-Couplers, of which the following is a specification.

My invention relates to improvements in hose-couplers; and the object of my invention is the provision of a hose-coupler which may be instantly connected or disconnected when desired, but which will form an absolutely reliable and perfect coupling and which cannot possibly become accidentally uncoupled.

Another object of my invention is the provision of a hose-coupler which will be simple, durable, and inexpensive in construction and thoroughly efficient and practical in every particular.

To attain the desired objects, my invention consists of a hose-coupler embodying novel features of construction and combination of parts substantially as disclosed herein.

Figure 1 is a perspective view of the male member of the coupler. Fig. 2 is a similar view of the female member. Fig. 3 is a central longitudinal sectional view of Fig. 1. Fig. 4 is a similar view of Fig. 2, taken on line *vv*.

A represents the male member, and B the female member, of the coupling. The said male member is provided with a neck *a*, having ears or lugs *a'* diametrically opposite each other with V-shaped slots *a''* on outer surface. At base of neck is an annular rim *a'''*, having recesses *a''''* on outer edge for the reception of an implement for rotating the rim and neck. Abutting against the base end of neck *a*, within a recess *a''''*, about centrally located in the rim *a'''*, is the hose end C of member A, provided with an annular rim *c*, which is held in place by a gasket *c'* and a screw-threaded collar *c''*, that is connected with a corresponding screw-thread within the back of rim *a'''*. Upon the outer surface of the body C is a screw-threaded ring D, having corresponding screw-threads on said body, said ring being rotated longitudinally on the body C, so as to form a bearing when in place for the collar *c''* and give steadiness to the spherical rotation of the rim *a'''* and neck *a*.

B designates the female member and forms

the rigid or stationary part within whose socket-body the male member is rotated. *b* designates the socket-body, containing interiorly-arranged grooves *b'* *b'*, said grooves having square walls and slanting slightly inward from a direct circular line from the entrance-mouths *b''*. At the base of said grooves is a single thread *b'''*, so arranged as to engage the V-slot *a''* of the lugs. The socket-body contains entrance-mouths *b''*, that reach from the outer surface interiorly to a gasket *b'''*, that forms the abutment for the neck *a*.

When the two members A and B are assembled together, the neck *a* enters the socket-body *b*, the lugs *a'* *a'* passing within the entrance-mouths *b''* until the outer face of the neck *a* touches the gasket *b'''*, the lugs *a'* *a'* reaching the opening to the grooves *b'* *b'*. The neck *a* is then spherically rotated by means of a suitable implement placed on the rim *a'''*, engaging the recesses *a''''*, causing the lugs *a'* to pass within the grooves *b'*, the walls of which by their slanting construction pressing against the inner wall of the lugs cause the two parts of the coupler to become locked.

It is evident that I provide a coupler which can be connected or disconnected with ease and that it performs its function in a thorough and practical manner.

I claim—

1. A hose-coupler, consisting of a male member formed with a neck, a pair of notched lugs integral on said neck, the collar integral with said neck and having kerfs to receive an implement, the threaded ring screwing in the back of the collar and formed with a groove, the gasket secured in said groove, the pipe having the flange engaged by the gasket, the clamping-ring on the pipe, the female member formed in one piece and having kerfs to allow the passage of the lugs on the male member, a groove in the female member formed with a V-shaped thread to engage the lugs of the male member, and the gasket against which the end of the male member abuts.

2. A hose-coupler, consisting of a female member formed with an enlarged head, a recessed seat formed in said head, a gasket fitting in said recessed seat, a spiral groove in the wall of the seat formed with straight walls and a central projecting V-shaped thread, and

a male member provided with a pair of diametrically oppositely disposed lugs formed with a V-shaped groove, a collar provided with kerfs, a ring formed with a recess and
5 screwing into the back of the collar, a pipe formed with a flange, a gasket fitting in the recess of the ring and serving to press against said flange and hold the pipe in position, and

a securing-ring mounted on the pipe for drawing the flange of the pipe against the gasket. 10
In testimony whereof I affix my signature in presence of two witnesses.

CHARLES T. PALMER.

Witnesses:

C. C. CLARK,
H. L. CLARK.