

C. CALLAHAN.  
Hose-Couplings.

No. 149,438.

Patented April 7, 1874.

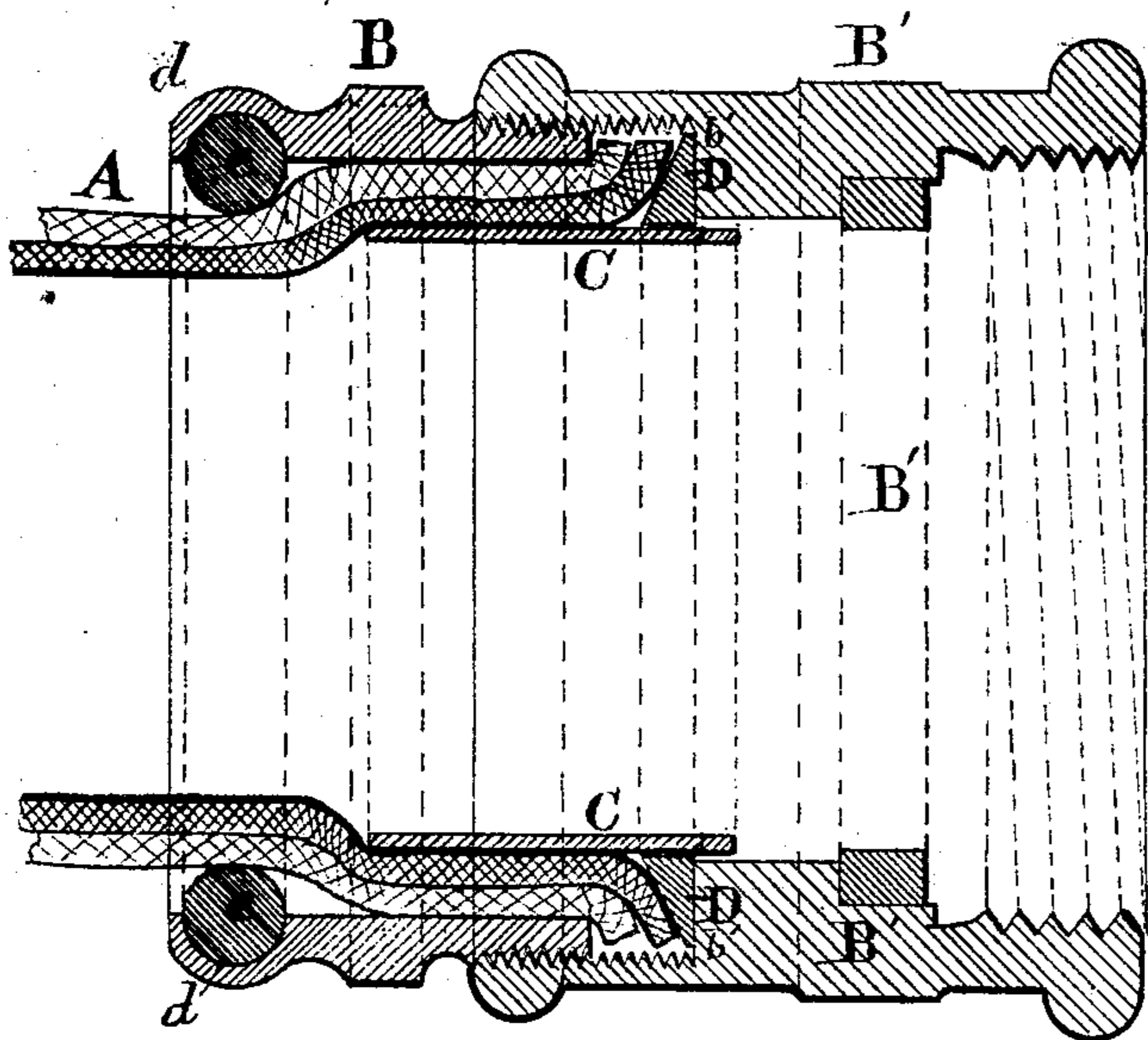


Fig. 1.

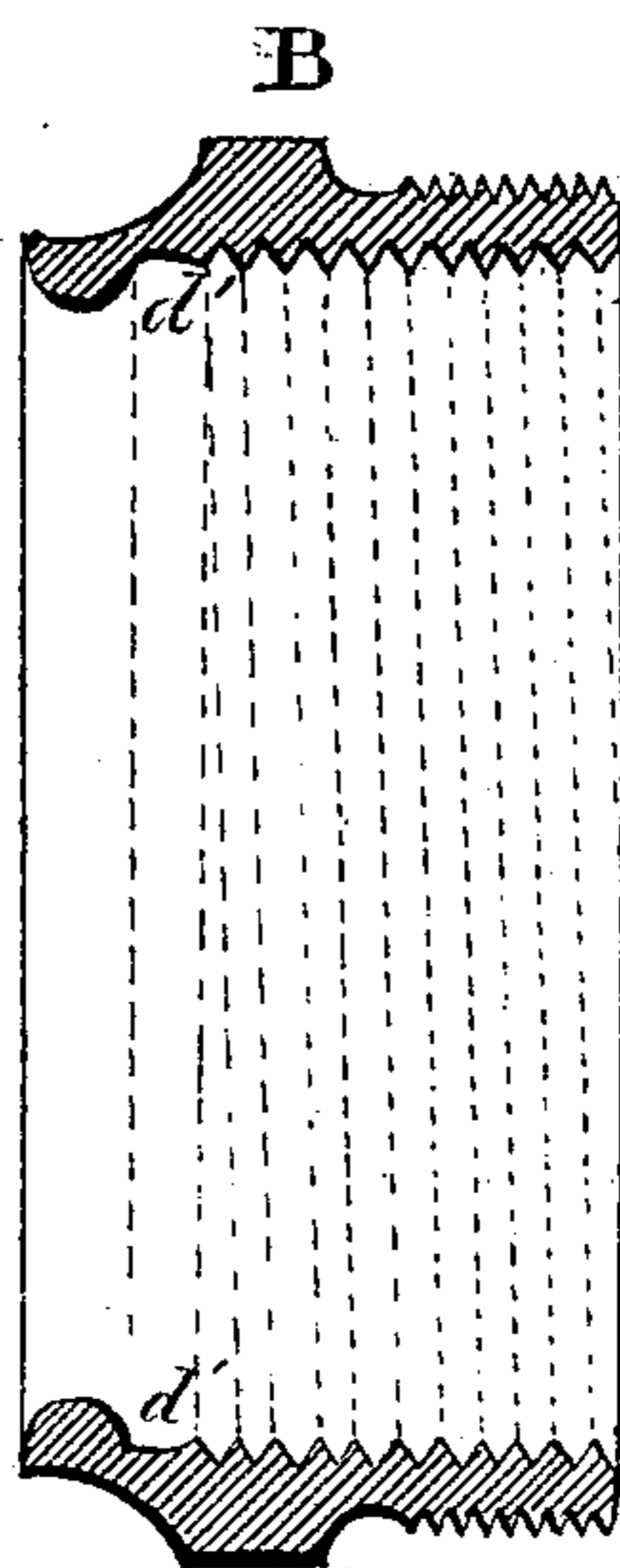


Fig. 2.

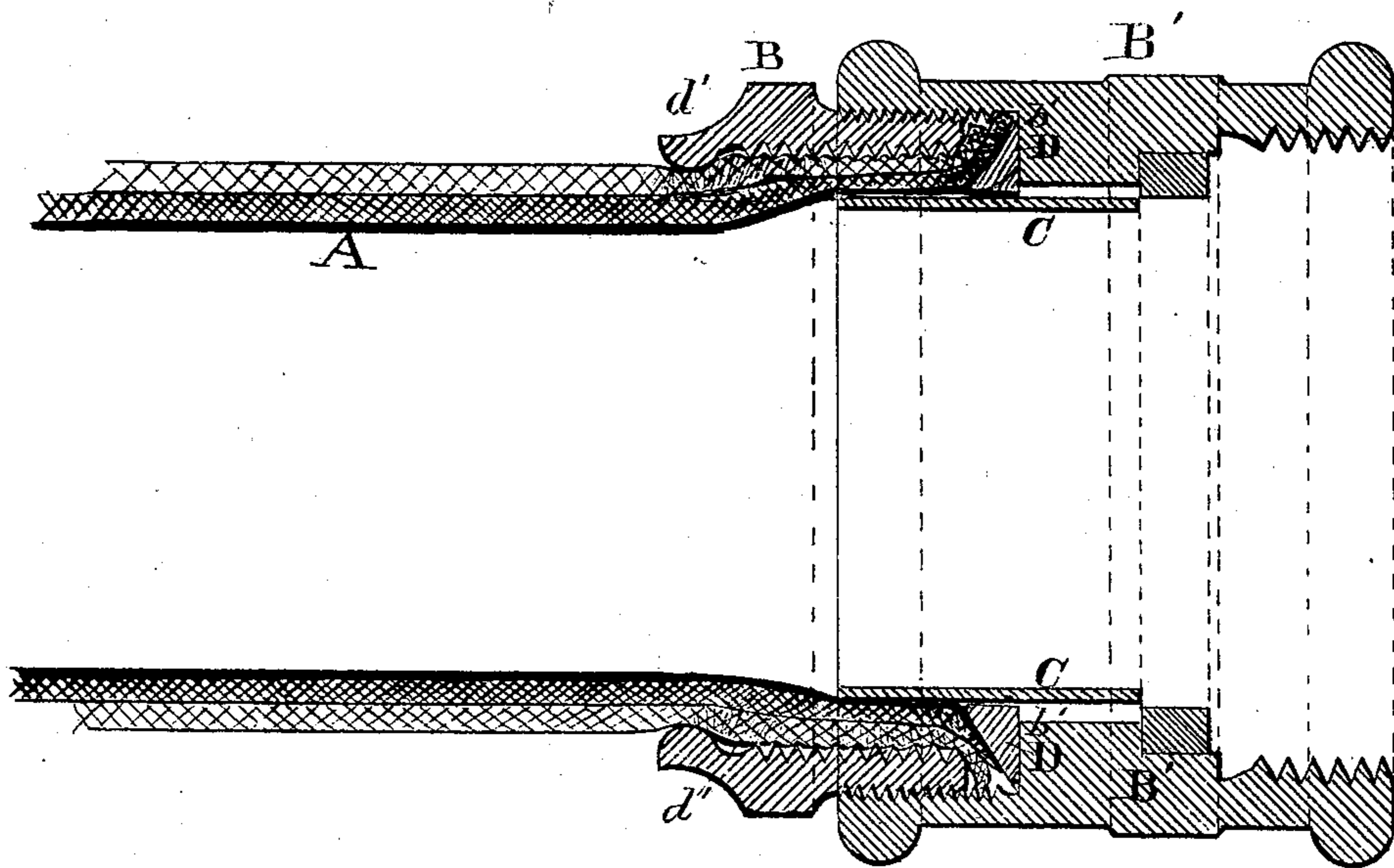


Fig. 3.

Attest.

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# UNITED STATES PATENT OFFICE.

CORNELIUS CALLAHAN, OF CHELSEA, MASSACHUSETTS, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO EDWIN E. SIBLEY, OF SAME PLACE.

## IMPROVEMENT IN HOSE-COUPPLINGS.

Specification forming part of Letters Patent No. **149,438**, dated April 7, 1874; application filed March 7, 1874.

*To all whom it may concern:*

Be it known that I, CORNELIUS CALLAHAN, of Chelsea, in the State of Massachusetts, have invented a new and useful Improvement in Hose-Coupling, of which the following is a true, full, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal section, and Fig. 2 represents the modification referred to herein. Fig. 3 represents the application of the modification.

The object of my invention is to provide a device for readily and effectually connecting elastic hose, and attaching the same to nozzles, which may be conveniently applied, and will enable the hose to resist all attempts at removal by strain or pressure; and it consists in the combination of the several parts, as hereinafter named and described.

To enable others skilled in the art to make and use my invention, I will describe the exact manner in which I have carried it out.

In the drawings, A represents the end of a piece of hose; B and B', the coupling-rings; C, a ring or tube of metal, inserted within the hose; and D, a washer, fitting outside of the inner tube C, and between the end of the hose and the shoulder *b'* of the coupling-ring B'. By this novel construction I succeed in securing the hose by the end, rather than by a clasp on the outside of the hose, and I thus avoid, in a great measure, the liability to breakage from expansion against the edge of the clasp. For the more complete protection, however, of the hose against damage from the clasp or coupling-ring, I construct the latter

with the groove or channel *d*, into which I fit the elastic band *e*, as shown in Fig. 1. Instead of using the elastic band *e*, the coupling-ring B, made as shown in Figs. 2 and 3, will give a good result. By the expansion, the hose is made to fill closely into the groove or channel *d'*, and thus secure it against danger of becoming accidentally detached.

The operation of my device is as follows: The inner tube C is first placed within the end of the hose to keep it well extended. The coupling-ring B, provided with the elastic ring *e*, as described, is passed over and a little beyond the end of the hose. The washer D is now slipped over the end of the inner tube C, and by means of its angular construction, as shown in Fig. 1, the portion next to the tube C passes in between the tube and the hose, thus forcing the end of the latter outward, to be caught between the coupling-ring B and the square shoulder *b'* of the ring B', and there be securely held, as shown in Fig. 1.

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

As a new article of manufacture, a hose-coupling constructed as described, and consisting of the ring B, provided with the elastic ring *e*, the washer D, the ring B', provided with the square shoulder *b'*, and the inner tube C, substantially as and for the purpose set forth.

CORNELIUS CALLAHAN.

Witnesses:

STEPHEN SIBLEY,  
ANNIE A. JENNINGS.