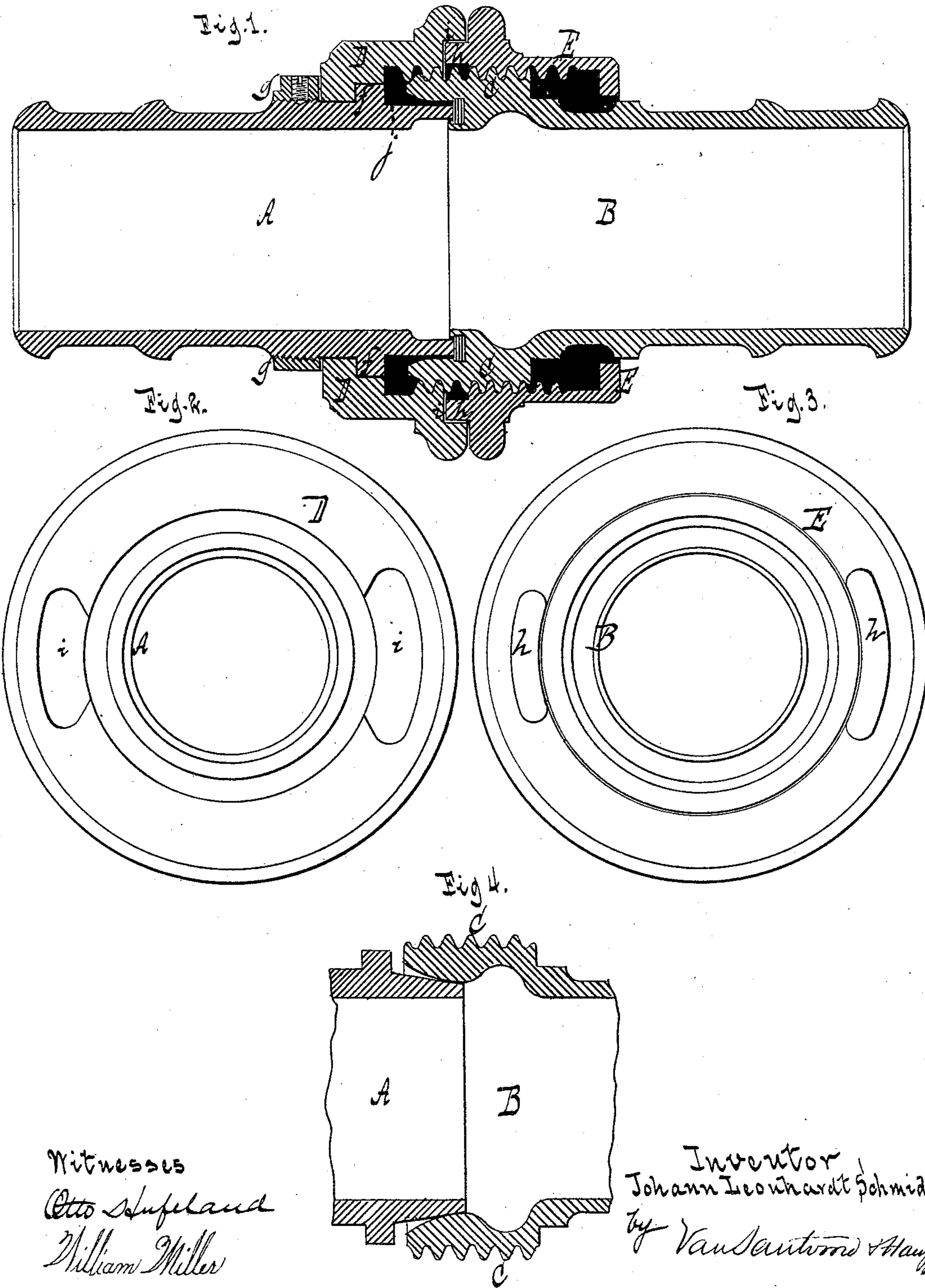


J. L. SCHMIDT.  
Hose-Coupling.

No. 217,643.

Patented July 15, 1879.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHANN L. SCHMIDT, OF DORTMUND, PRUSSIA, GERMANY.

## IMPROVEMENT IN HOSE-COUPPLINGS.

Specification forming part of Letters Patent No. **217,643**, dated July 15, 1879; application filed June 12, 1879.

*To all whom it may concern:*

Be it known that I, JOHANN LEONHARDT SCHMIDT, of Dortmund, in the Kingdom of Prussia and Empire of Germany, have invented a new and useful Improvement in Hose-Couplings, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal central section of my coupling. Figs. 2 and 3 are plan views of the coupling-nut and guard-nut. Fig. 4 shows a modification of the joint between the pipe-sections.

Similar letters indicate corresponding parts.

My invention relates especially to that class of coupling consisting of two pipe-sections, one provided with a head-screw and the other with a coupling-nut fitted to said screw. This form of coupling is defective, owing to the exposure of the head-screw as well as the packing.

To remedy this defect I arrange a guard-nut upon the head-screw, and provide one of the nuts—namely, the coupling-nut or the guard-nut—with one or more lugs adapted to interlock with sockets formed in the other nut, so that as the coupling-nut is screwed on or off the head-screw, the guard-nut turns therewith, and thus covers the thread of the head-screw without interfering with the setting of the coupling-nut.

In the drawings, the letters A B designate the pipe-sections, each of which is adapted to receive the end of a piece of hose. C is a head or end screw upon one of such sections. D is the coupling-nut, and E the guard-nut.

The coupling-nut D has a flange, whereby it is confined between a collar, *f*, formed on the pipe-section B, and a collar, *g*, screwed thereon. Both the nuts D E have threads of like pitch to each other and to that of the head-screw C. On the face of the guard-nut E are formed two lugs, *h h*, while in the face of the coupling-nut D are formed two sockets, *i*, corresponding to said lugs.

One of the lugs and sockets *h i* may be omitted, or a greater number than two may be used if deemed expedient.

When, as in this example, more than one lug and socket is used, they are made of different sizes, in order to insure the correct adjustment of the nuts.

When it is desired to couple the two sections A B, the guard-nut E should be at the extremity of the head-screw C. In this position of the guard-nut, the coupling-nut D may be brought up against the same in such a manner that the lugs *h* and sockets *i* interlock with each other. The coupling-nut D may then be screwed on the head-screw without interference from the guard-nut E, inasmuch as the latter turns with it. Hence the coupling-nut may be screwed up equally as tight as if there were no guard-nut used. Said guard-nut likewise turns with the coupling-nut D when the latter is unscrewed from the head-screw C, and when this is done the guard-nut takes its place over the thread of the head-screw, thereby effectually protecting the thread of such screw. In this position the coupling-nut D also serves to protect, to an extent, a packing, *j*, which is seated in the pipe-sections A, as shown in Fig. 1. In Fig. 4 I have shown the pipe-sections A B as being joined without packing.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a hose-coupling, the combination, with two pipe-sections, one provided with a head-screw, of a coupling-nut and a guard-nut, both fitted to said head-screw, one provided with one or more lugs, and the other with sockets adapted to interlock with such lugs, substantially as described.

2. In a hose-coupling, the combination, with two pipe-sections, one provided with a head-screw and a seated packing, of a coupling-nut and a guard-nut, both fitted to said head-screw, one provided with one or more lugs, and the other with sockets adapted to receive the lugs, substantially as described.

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Witnesses:

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