

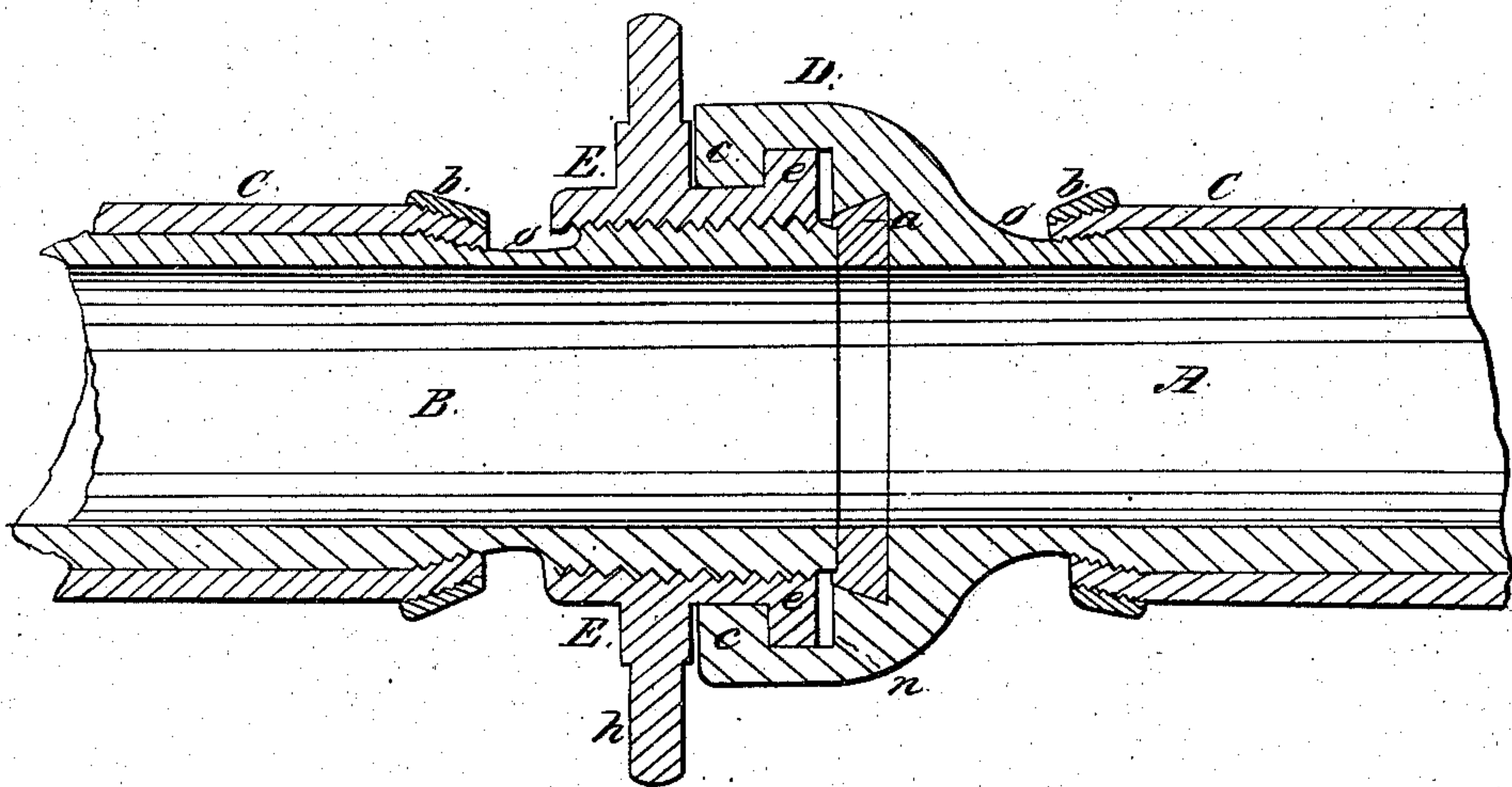
*Osbourne & Massey,*

*Hose Coupling*

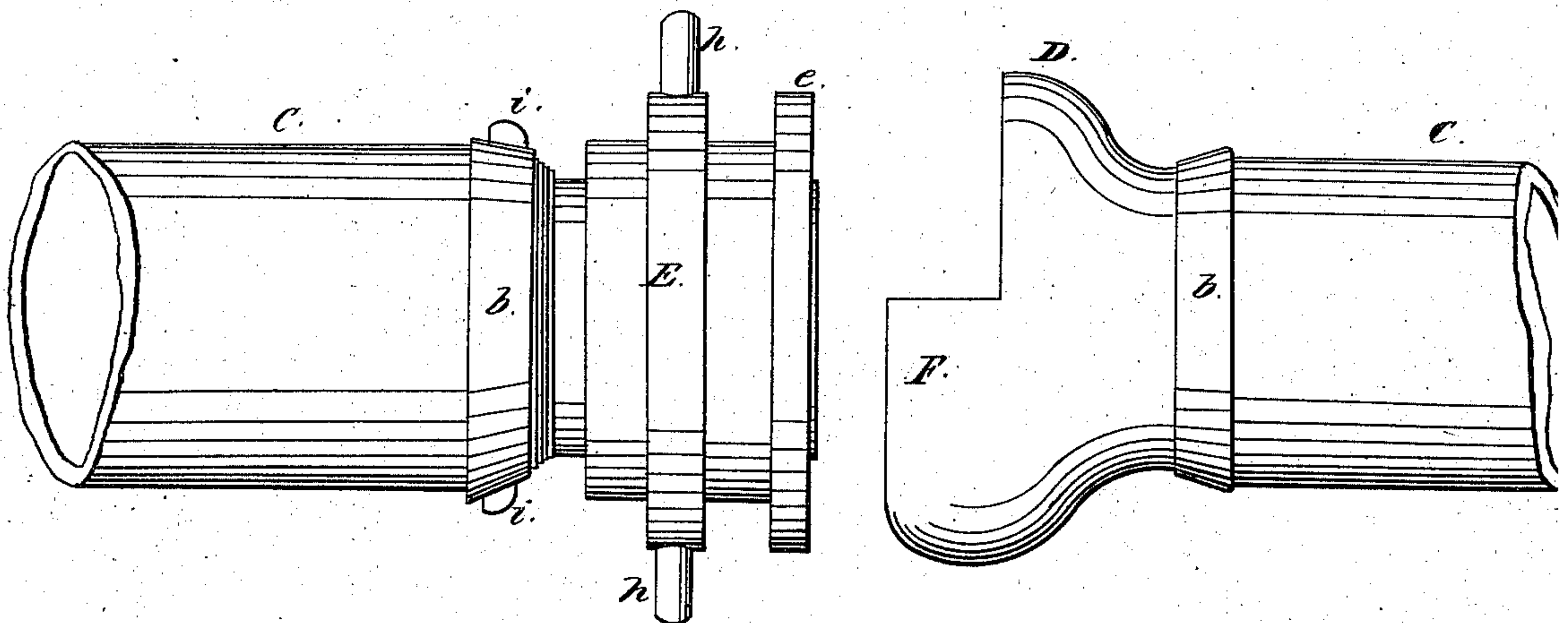
*N<sup>o</sup> 62,675.*

*Patented Mar 5, 1867.*

*Fig. 1.*



*Fig. 2.*



*Witnesses.*

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Attorn.*



# United States Patent Office.

WILLIAM JOHN OSBOURNE AND G. B. MASSEY, OF NEW YORK, N. Y.

*Letters Patent No. 62,675, dated March 5, 1867.*

## IMPROVEMENT IN HOSE-COUPLINGS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that we, WILLIAM JOHN OSBOURNE and G. B. MASSEY, of New York, in the county of New York, and State of New York, have invented certain new and useful Improvements in Hose-Couplings; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use our invention, we will proceed to describe it.

Our invention consists in a novel method of securing the hose pipes or couplings, and in a novel arrangement of devices for coupling or locking the joints of pipe together.

Figure 1 is a longitudinal section of the coupling and pipe when united.

Figure 2 is a side view of the coupling devices separated.

Our invention has for its object the production of a coupling that can be quickly and easily united without the use of any special tools for that purpose, and which shall be so constructed that there shall be no screw-thread liable to be bruised or injured by falling on the stones of the pavement, or by similar means; and in providing a simple and efficient means of uniting the hose to the pipe.

To accomplish these objects we construct the coupling of two parts, A and B, as shown in fig. 1. On the part A an enlargement or head, D, is formed. For about one-half of its circumference this head, D, has a lip, F, projecting, as shown in fig. 2, and on the inside of this projecting part, F, there is formed a circumferential groove or recess, *n*, as shown in fig. 1. The part B consists of a simple tube, with a screw-thread cut externally on its end, and on this is fitted a collar, E, having a corresponding thread cut on it internally, so that by turning the collar E it may be screwed backward or forward on the tube B. This collar, E, has a flange, *e*, projecting radially from it at one end, as shown, this flange, *e*, being suited to fit in the recess or groove *n* in the projection F. The collar E is also provided with lugs or handles, *h*, as shown, by which it can be turned when desired. Within the head D a recess is formed internally, to receive a ring of leather or other suitable packing, as represented by *a*, fig. 1. To unite the parts A and B the collar E is screwed forward to the end of B, and its flange, *e*, then dropped into the groove *n* of the projecting part F of the head D. The collar is then turned backward, by which means the tube B is forced forward until its end impinges tightly against the packing ring *a*, thus uniting the two parts and closing the joint tight. By this method of construction we avoid the necessity of turning the projecting lip F, which may thus be left stationary, in proper position to have the collar E on the opposite end of the coupling dropped therein, the collar being turned instead of the lip F to tighten the joint. As it is necessary that the end of the tube B should come so as to bear directly on the packing ring *a*, and as this would not be certain to occur if the part F were turned, as in that case the collar might slip wholly or partially out before being tightened, it will be seen that this arrangement of the parts constitutes an important feature of our invention. In no case does either portion of the tube A or B require to be turned, the turning of the collar E alone being necessary to close the joint. Thus all twisting of the hose is entirely avoided, and the coupling effected in a most speedy and certain manner. It will be observed that the parts A and B are each of them somewhat reduced in circumference at the points *o*, by having their outer surface cut away there, so as to form an inclined surface which is largest toward the outer end. On this inclined surface a screw-thread is cut, as shown. A ring, *b*, of proper size to slip over the tube is provided, this ring being made tapering, to correspond with the inclined or tapering portion of the tubes, and has a screw-thread cut on its interior surface. The ring *b* being first slipped on to the tube, the hose C is then forced on until its end covers the inclined surface on the tube, when the ring *b* is brought back over its end and screwed tight, thus compressing and securing the hose tightly between the ring and the tube. The ring *b* has lugs, *i*, with which to turn it, as represented in fig. 2. By this means the hose can be quickly and securely fastened to the coupling, or detached therefrom, as may be desired.

It is obvious that this manner of uniting the pipe or hose to the coupling may be used in all cases where it is desired to unite hose to any kind of metal pipe. Instead of having the projection D extend half-way round, as in this case, it may consist simply of lugs on opposite sides, with a lug at the bottom side to prevent the collar *e* from dropping out before being tightened.

Having thus described our invention, what we claim, is—

1. The tube A, provided with the projecting lip F, having a groove, *n*, formed therein, in combination with the tube B, having the collar E provided with the flange *e* thereon, when said parts are arranged to operate as and for the purpose set forth.

2. We claim securing the hose to the tubes by means of the inclined surfaces and the rings *b*, constructed and arranged to operate as set forth.

WILLIAM JOHN OSBOURNE,  
G. B. MASSEY.

Witnesses:

WM. F. McNAMARA,

J. A. SERVICE.