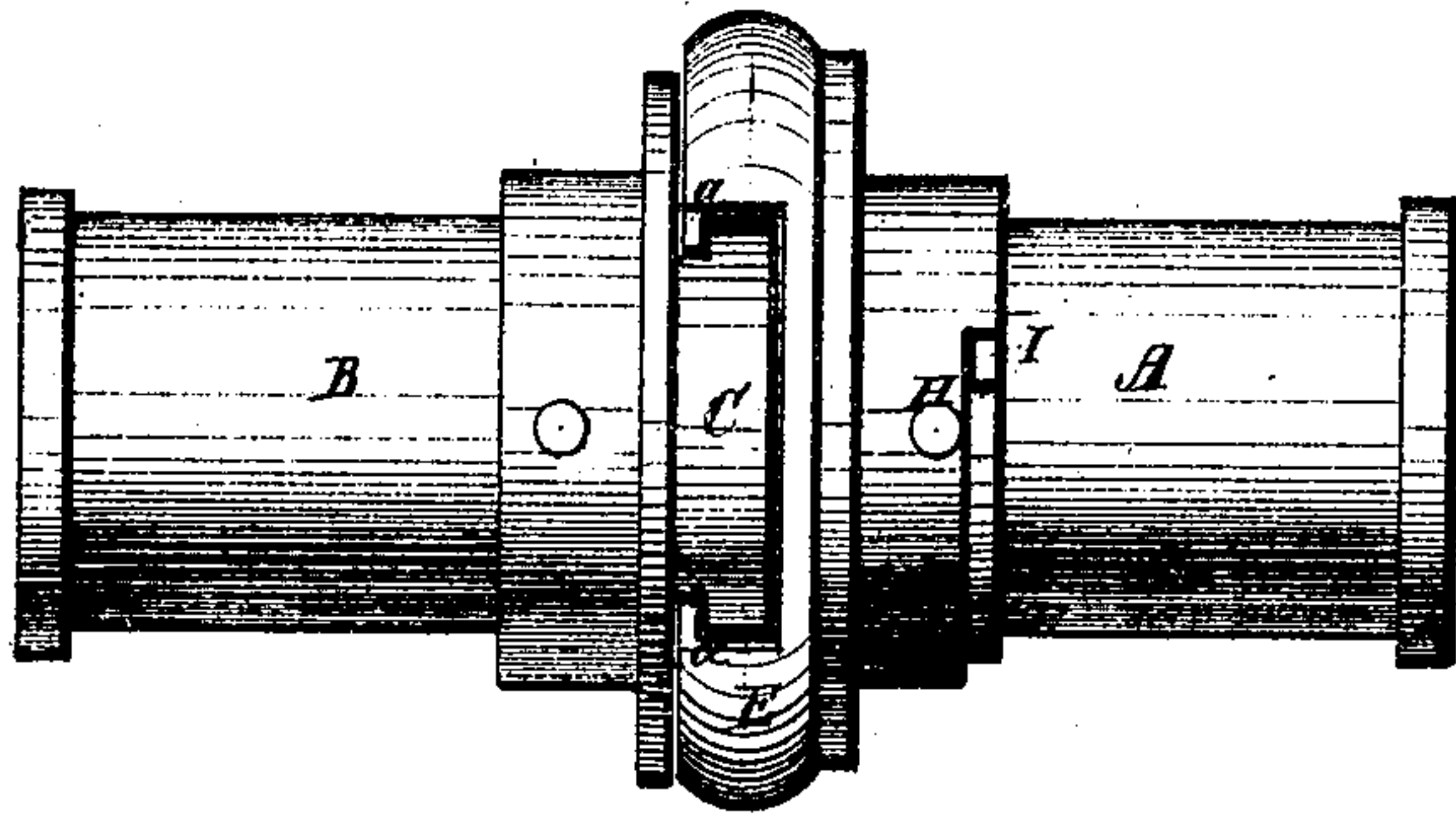
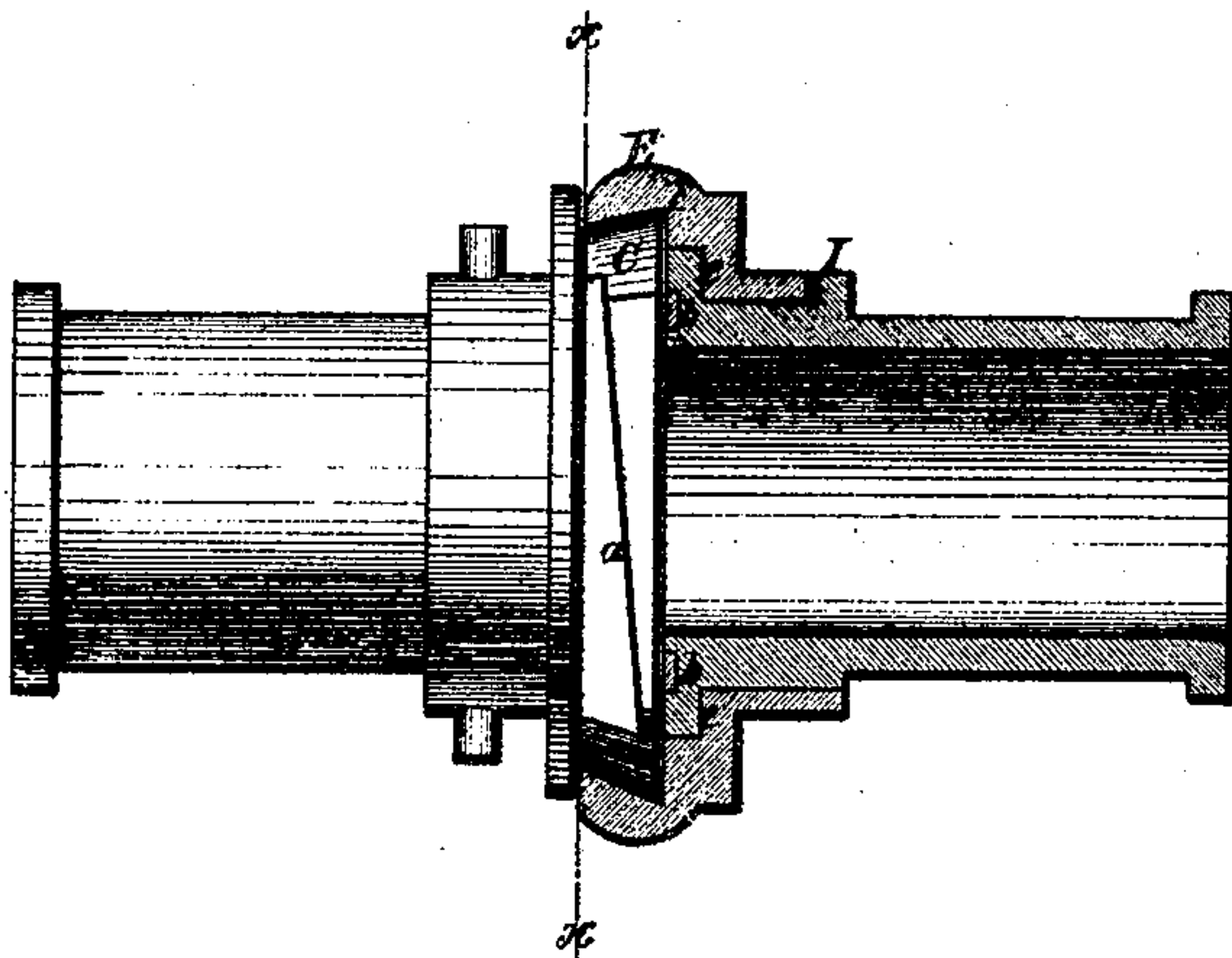


*J. D. Ware,*  
*Pipe Coupling.*  
*No. 98,131. Patented Dec. 21, 1869.*

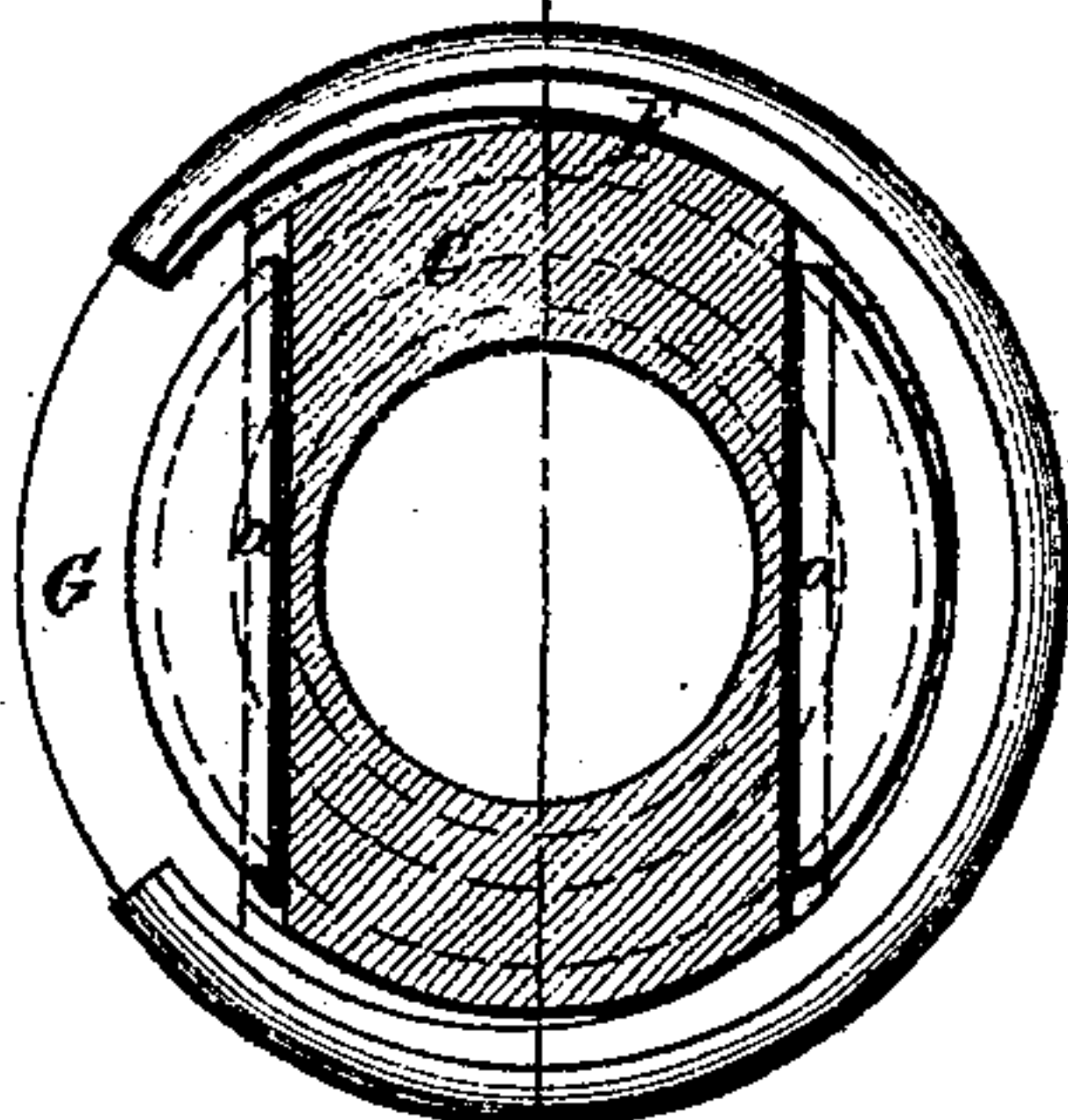
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



**Witnesses:**  
*A. Benneventorf*  
*Alex. S. Roberts*

**Inventor:**  
*J. D. Ware*  
 PER *[Signature]*  
**Attorneys.**

# United States Patent Office.

J. D. WARE, OF SAVANNAH, GEORGIA.

Letters Patent No. 98,131, dated December 21, 1869.

## IMPROVEMENT IN PIPE-COUPLING.

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

*To all whom it may concern:*

Be it known that I, J. D. WARE, of Savannah, in the county of Chatham, and State of Georgia, have invented a new and improved Pipe-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvement in pipe-couplings, and consists in forming a dovetailed groove across the end of one part, and fitting on the other part a dovetailed projection to engage in the groove, and in arranging on one of the parts an eccentric ring to work against the head of the projection and force it tightly into the groove.

Figure 1 is a side elevation;

Figure 2 is a side view, partly in section and partly in elevation; and

Figure 3 is a transverse section on the line *x x*, fig. 2.

Similar letters of reference indicate corresponding parts.

The part A is provided with a tapered dovetailed groove, across the end, as indicated by the lines *a*, and the part B is provided with a corresponding tapered dovetailed projection, C, to fit into the same.

The part A has in the bottom of its groove an annular recess, *b*, for the reception of a ring, *c*, of India rubber or other packing *e*, and it also has an exterior

ring, E, with an eccentric groove, F, for acting on the large end of the projection C, to force it into its groove when turned around on the part A.

This ring is provided with a notch, G, at one side, for the passage of the projection C to the groove. It is also provided with pins H, for the application of a spanner or other wrench for turning it.

The projection C is provided with a hole, coinciding with the bore of the other part, for the passage of the water or other substance.

The part A is provided with a stop-pin, I, to arrest the ring E at the right point to admit the passage of the projection C into its groove.

The annular recess for the packing is made larger at the bottom than at the top, to hold the packing more securely.

Having thus described my invention,

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

The pipe-coupling formed by the combination of the projection C on the part B, with the dovetailed and wedge-shaped groove of the part A, and with the eccentric-grooved ring E, substantially as herein shown and described, and for the purpose specified.

J. D. WARE.

Witnesses:

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WM. D. SULLIVAN,

PHILIP M. RUSSELL, Jr.