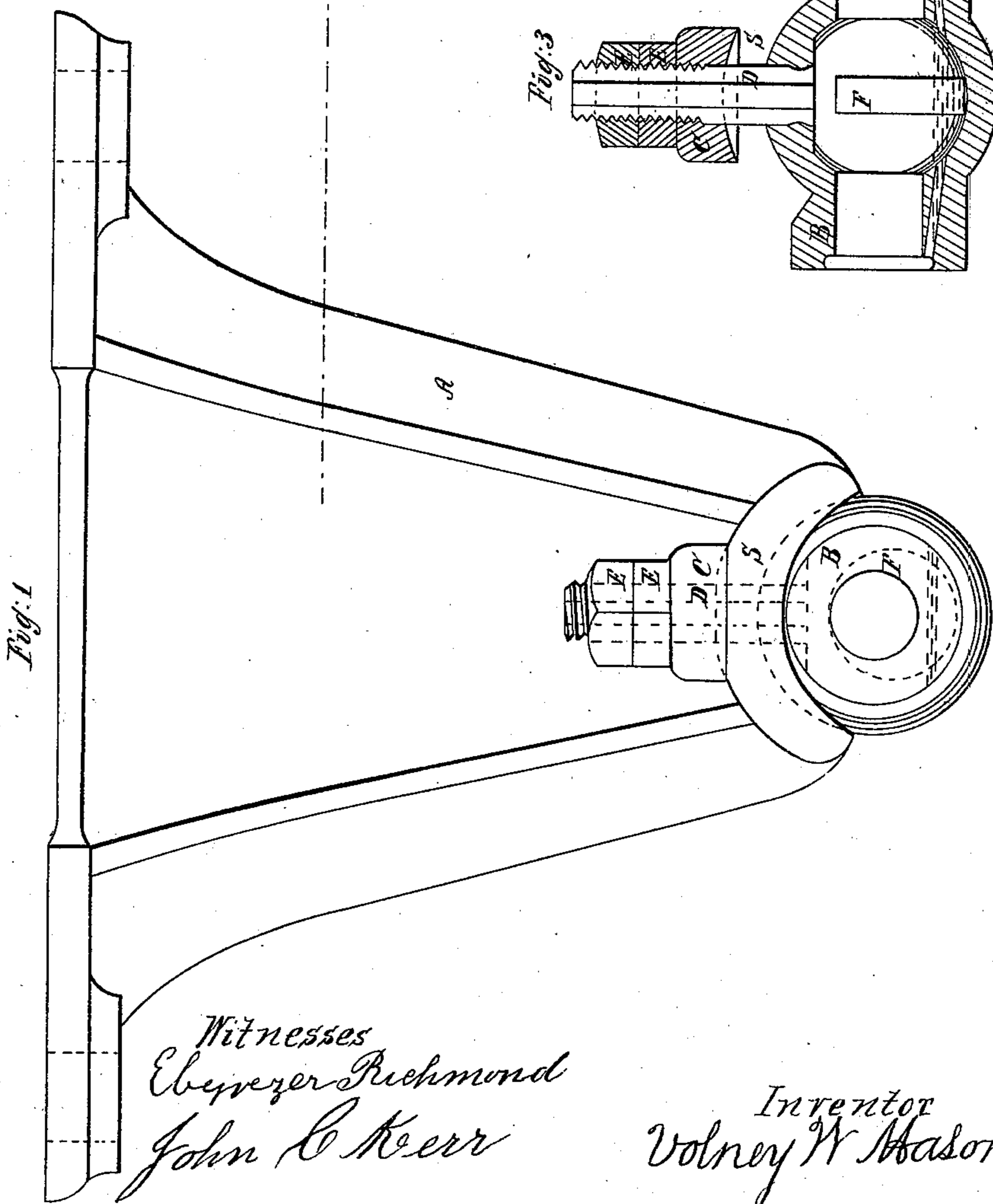
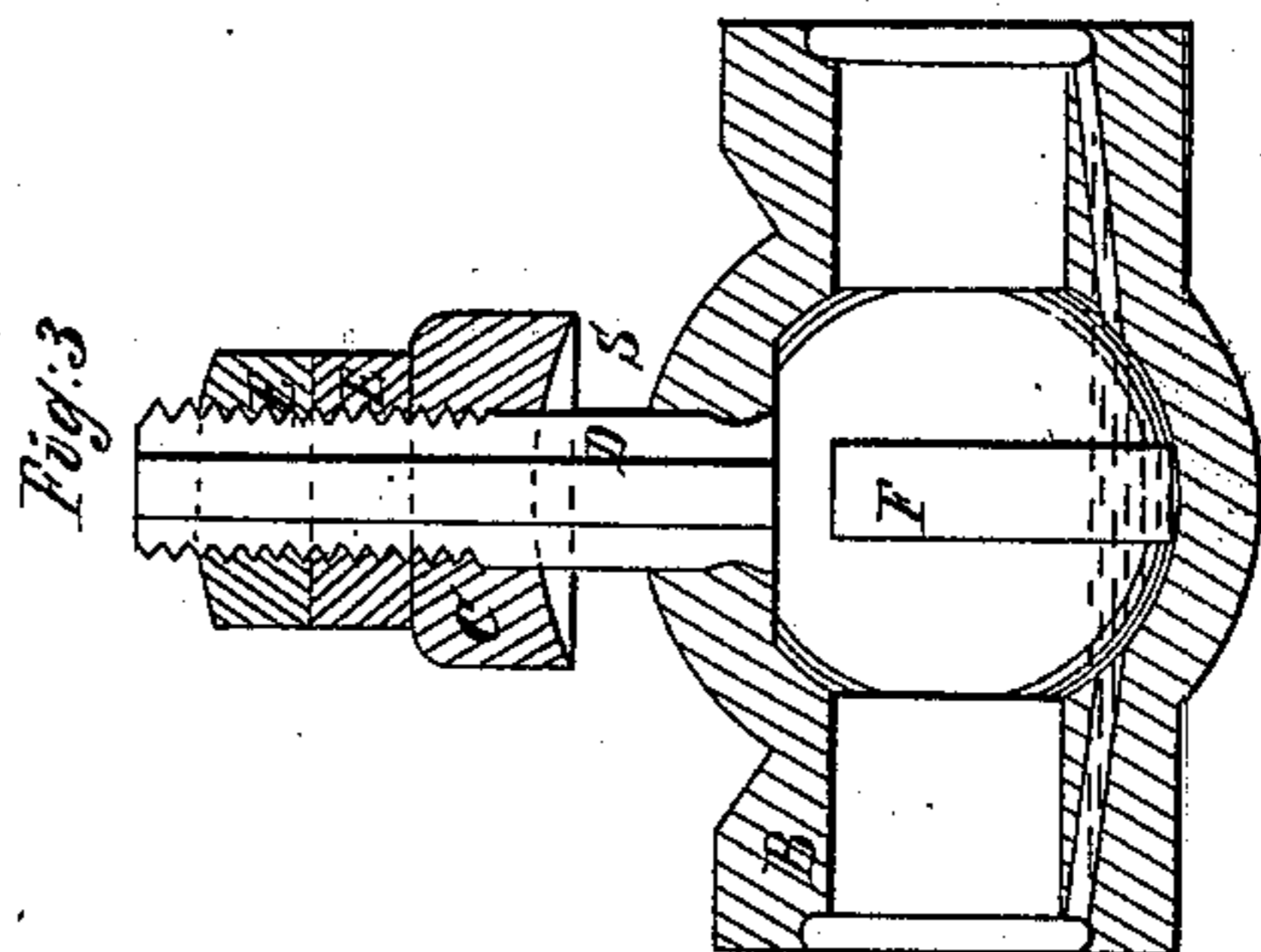
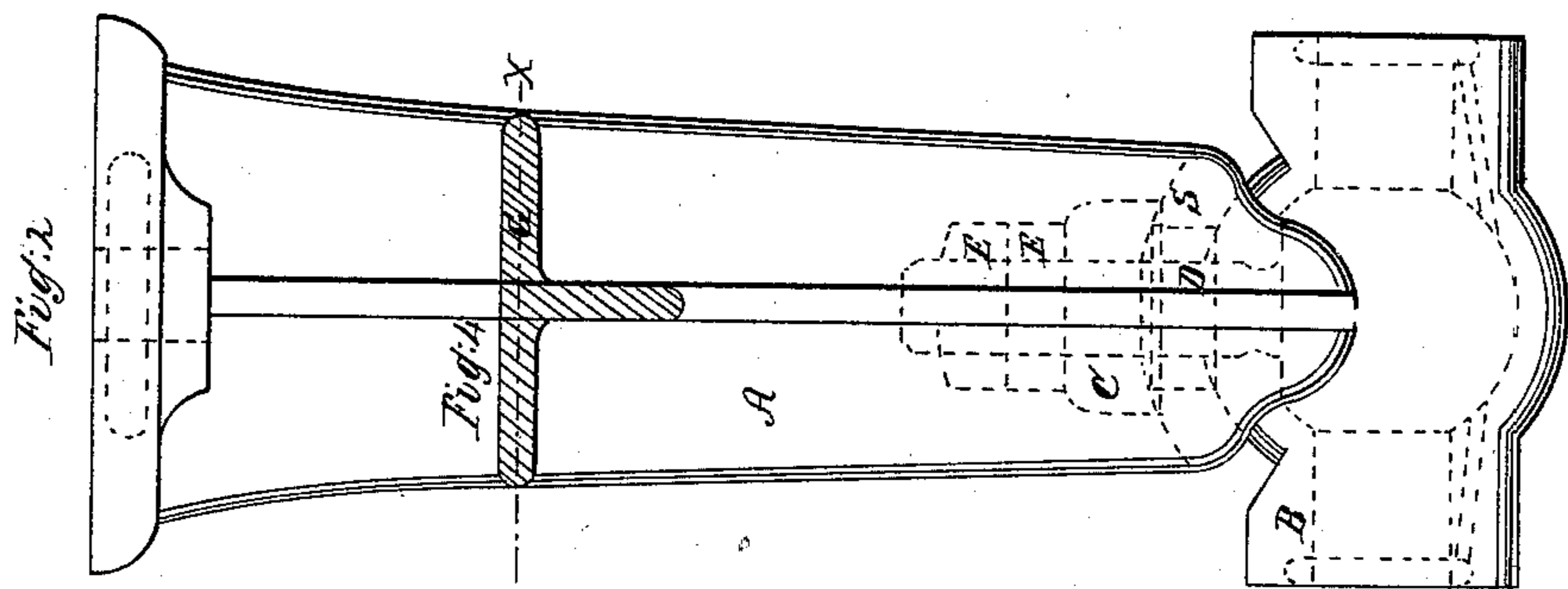


V. W. Mason.

Shaft Hanger.

N^o 104,044.

Patented Jan. 7, 1870.



Witnesses
Eberzer Richmond

John C. Kerr

Inventor
Volney W. Mason

United States Patent Office.

VOLNEY W. MASON, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 104,044, dated June 7, 1870; antedated May 30, 1870..

IMPROVED ADJUSTABLE HANGER FOR SHAFTING.

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, VOLNEY W. MASON, of the city and county of Providence, and State of Rhode Island, have invented a new and improved Hanger-Bearing for Shafting; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a plan view of the hanger longitudinally with the shaft, showing a drop-hanger terminating at the bottom with the concave surface receiving the ball bearing B, and convex surface receiving the retaining-cap C, which is held in its proper place by the nuts E E.

Figure 2 is a view of the same at a right angle to fig. 1, similar parts being indicated by like letters.

Figure 3 is a section through fig. 2, showing the internal construction of the ball bearing B, with the ring F, for purpose of raising the oil or liquid, in which it runs, to the top of the shaft; also, the recesses at the ends of the bearing and passages for returning the liquid to the central chamber, thereby causing a constant supply or lubrication when the shaft revolves; also shows the hollow stem or bolt D, and retaining-cap C, screw on stem, and nuts E E.

Figure 4 is a section through one of the standards of the hanger, showing the dimensions of plate and ribs, similar to ordinary hangers.

To enable others skilled in the art to construct and use my invention, I will proceed to describe its construction and operation.

I construct the parts of the hanger of cast and wrought iron, usually, although in some cases other metals or materials may be employed, the principle remaining the same.

The spherical cavity at the bottom of the hanger is cored out in the casting nearly to the finished size; in some cases the coring may be exact to the size by proper attention being paid to the molding, or by the use of an iron core, although the socket is usually finished by use of a counterboring tool.

The ball bearing B may be cast to the size, or a trifle larger, and finished to fit the socket.

The stem or bolt D may be first finished, then laid in the mold and cast solid with the ball bearing B, or may be screwed into the bearing B, or cast solid, of the same metal as B.

The concave cap C is made, on its inner circle, to correspond with the outside or convex surface on which it rests, which is the segment of a circle, having its center in the center of the ball bearing B.

The socket receiving the ball bearing B has a hole in its center larger than the stem D, to allow sufficient oscillating movement for adjustment.

The two nuts E E are provided, one to check the other, so that the cap C may freely adjust with the bearing to the shaft. In some cases one single nut may be applied, and that screwed down firmly to the cap C, after the shaft has found its proper bearing.

The ring F is made of spring-steel, or other suitable metal.

I claim—

A hanger-bearing, B, when constructed and relatively arranged with the stem D, cap C, nuts E E, spherical socket S, as described, and for the purposes specified.

VOLNEY W. MASON.

Witnesses:

EBENEZER RICHMOND,
WILLIAM MASON.