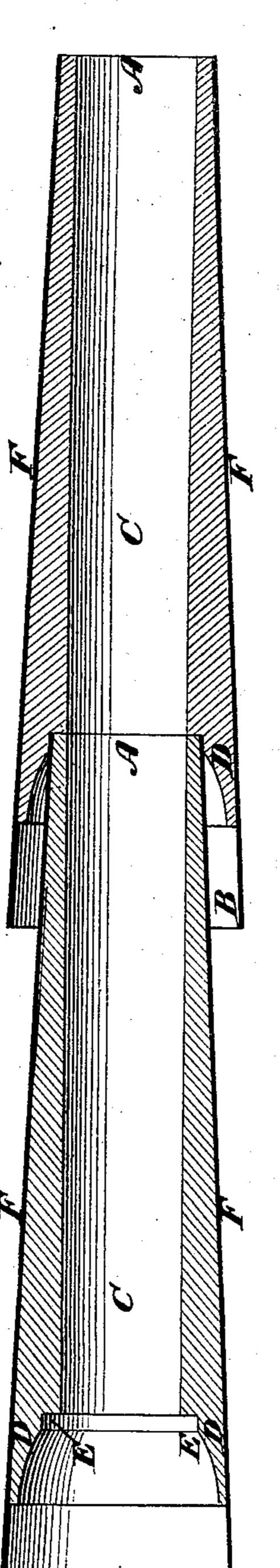
## G. W. EVANS. Centering Joints for Water-Pipes.

No.152,094.

Patented June 16, 1874.



George Wordens Inventor

M. Willowghly Attorney.

Witnesses.
C. F. Franker

## UNITED STATES PATENT OFFICE.

GEORGE W. EVANS, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN R. HALLADAY, OF SAME PLACE.

## IMPROVEMENT IN CENTERING JOINTS FOR WATER-PIPES.

Specification forming part of Letters Patent No. 152,094, dated June 16, 1874; application filed February 6, 1874.

To all whom it may concern:

Be it known that I, George W. Evans, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Mode of Centering Joints in Water, Drain, and Sewer Pipes, which improvement applies to either metal, cement, or metal and cement pipes; of which the following is a specification:

The nature of my invention consists in providing a better mode of connecting lengths of pipes by a beveled socket, marked D in the accompanying drawing, from the shoulders E toward the mouth of the female end B, using conical-shaped pipes, made of sheet-iron, marked F, and cement or other material, as appears in the drawing. In telescoping these the male end A is inserted into the female end B at the joint, abutting firmly against a collar or shoulder, E, inside, and held in its place by my invention, by a short socket approximating to the size of the end of the pipe inserted, from which socket the beveling D commences, sloping gradually toward the mouth of the female end B, leaving ample space to fill in with cement or other material, as may be required, by which it becomes a hermetically-sealed joint.

I am aware that drain-tile has been heretofore shown in which the cylindrical end of
one was made to enter into the enlarged and
conical end of the one next adjacent, and
therefore I do not broadly claim such a construction; but in such case the conical or flaring portion of the pipe began at the shoulders,
in which construction it was difficult to align
the pipes, and have equal space all around for
the admission of the cement, and also the cement was more likely to protrude through every
crack into the interior of the tube, or in case
the cement failed to enter quite to the bottom
of the opening the water might leak out.

What, therefore, I claim as my invention is—

The drain-tile constructed as described, with the shoulder, against which the end of the entering tile abuts, the cylindrical part next thereto, in which the said end fits, and the conical part flaring outward from the cylindrical, as and for the purposes set forth, and substantially as shown and described.

GEORGE W. EVANS.

Witnesses:

SAMUEL M. CHAMBERS, GEORGE S. GEE.