

M. FOLLIARD & W. T. TRAVIS.  
STREET CONNECTIONS FOR HYDRANTS.

No. 171,116.

Patented Dec. 14, 1875.

Fig. 1.

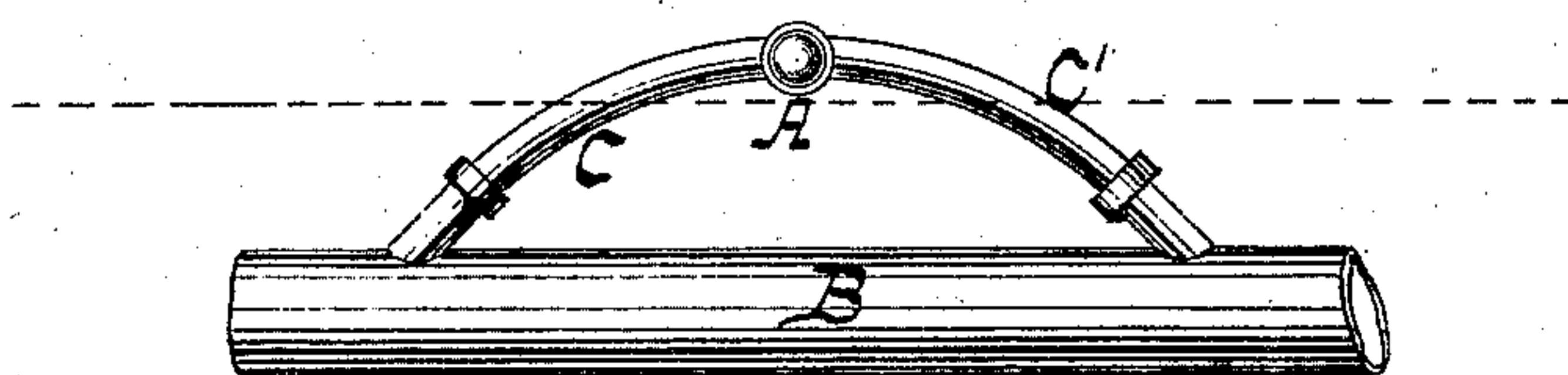


Fig. 2.

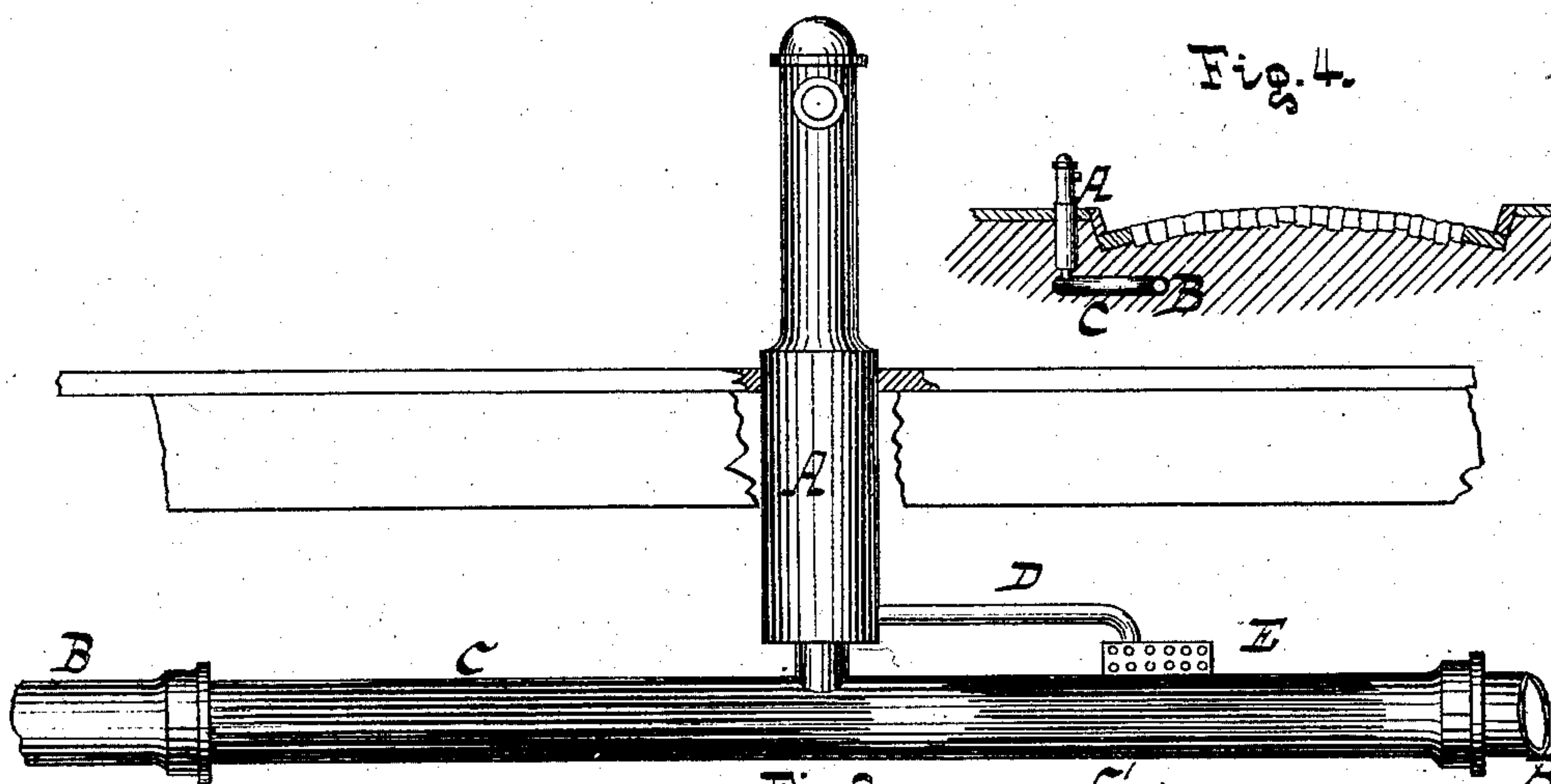


Fig. 4.

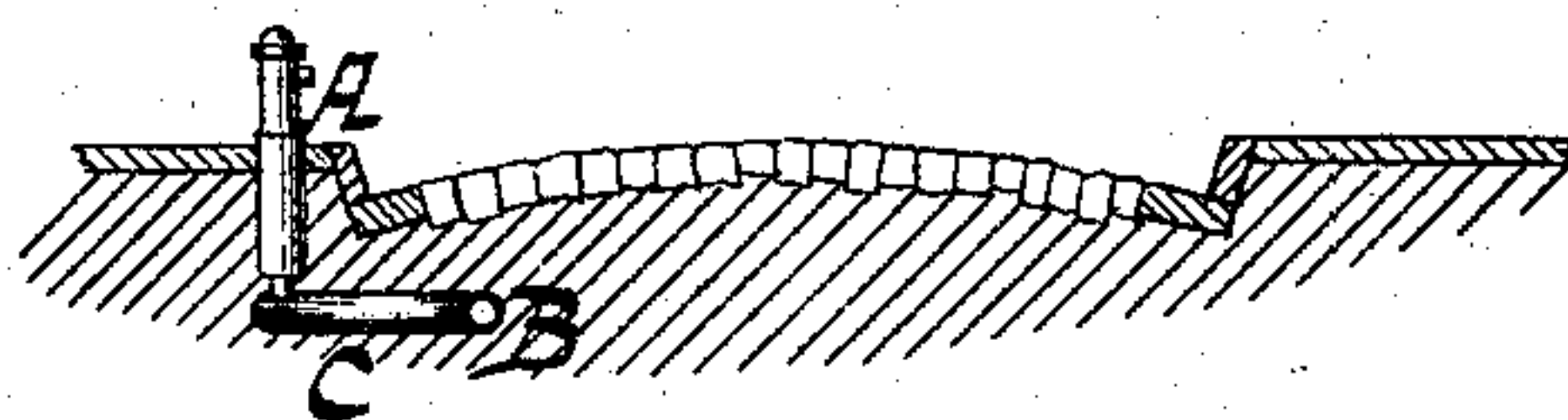
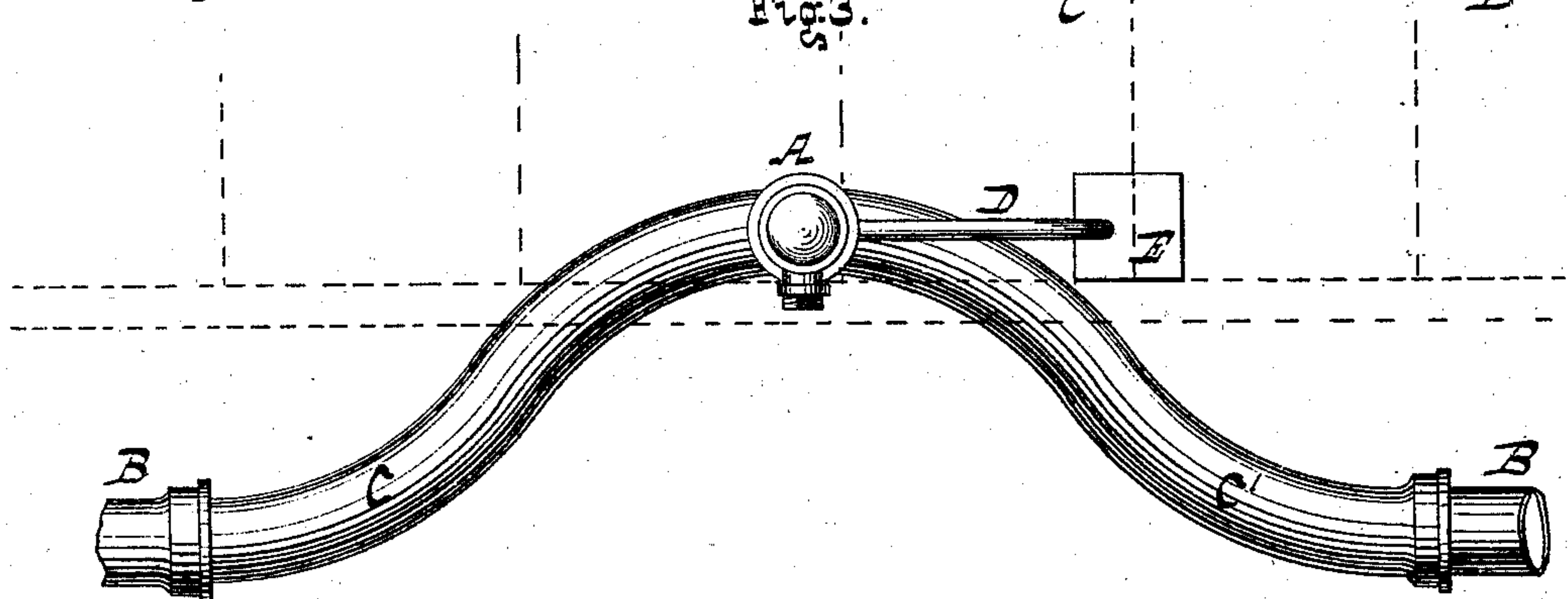


Fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

MICHAEL FOLLIARD, OF BROOKLYN, AND WILLIAM T. TRAVIS, OF FLAT-BUSH, NEW YORK.

## IMPROVEMENT IN STREET-CONNECTIONS FOR HYDRANTS.

Specification forming part of Letters Patent No. 171,116, dated December 14, 1875; application filed November 18, 1875.

*To all whom it may concern:*

Be it known that we, MICHAEL FOLLIARD, of Brooklyn, and WILLIAM T. TRAVIS, of Flatbush, in the county of Kings and State of New York, have invented a new and useful Improvement in Street-Connections for Hydrants, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a plan view of one form of our invention. Fig. 2 is a front elevation of another form thereof. Fig. 3 is a plan view of the latter. Fig. 4 shows our invention applied to a street-hydrant.

Similar letters indicate corresponding parts.

Our invention relates to an improved means for connecting hydrants to the water-main of streets, and has for its object to prevent freezing of the water. It consists in combining with the water-main, and with a hydrant situated either on the sidewalk of a street or inside of a building, a return-bend, whose branches extend, respectively, from the main toward and from the hydrant, in such a manner that an uninterrupted circulation of water is produced to and from the hydrant.

In the drawing the letter A designates a street-hydrant, which may be of the ordinary construction, and B is the water main or pipe of a street.

In the ordinary method of forming street-connections for hydrants a branch pipe is used, extending from the water-main to the hydrant, and which always contains a quantity of water. It is obvious that in cold weather the water remaining in this branch pipe is liable to freeze, and in such case the supply of water to the hydrant is cut off. To overcome this danger of freezing we use for the purpose of connecting the hydrant to the water-main B, a so-called return-bend, which is composed of branches C C', the branch C extending from the main to the hydrant, while the branch C' extends from the hydrant to the main.

These branches C C' may describe either an inclined or a straight course with respect to the water-main.

By means of the return-bend C C' an uninterrupted circulation of water is caused to take place to and from the hydrant A, and hence freezing of the water is to the greatest possible extent prevented.

In the example of our invention shown in Fig. 1 the return-bend is connected to the water-main B without interrupting the course thereof, while in the remaining figures it is so arranged as to form a continuation of the main, the branches C C' in either case extending toward and from the hydrant.

Our invention is applicable to street-hydrants, as shown, or to hydrants in buildings. In applying the invention to hydrants in buildings the branches C C' of the return-bend are simply made of sufficient length to extend into the lower part of the building, where the branches are connected to the hydrant (one or more) in any suitable manner.

To the lower part of the hydrant A is connected one end of a pipe, D, the other end of which is connected to a cess-pool, E, that is partially or wholly embedded in the earth, and the lower part of which is perforated, as seen in Fig. 2. The object of the cess-pool E is to receive the refuse-water remaining in the hydrant after it is shut off, and to discharge the water into the earth.

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

The combination of a return-bend with the street-main B, and with a hydrant, A, situated either on the sidewalk or inside of a building, said return-bend being formed substantially in the manner herein shown and described.

In testimony that we claim the foregoing we have hereunto set our hands and seals this 12th day of November, 1875.

MICHAEL FOLLIARD. [L. S.]  
WILLIAM T. TRAVIS. [L. S.]

Witnesses:

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