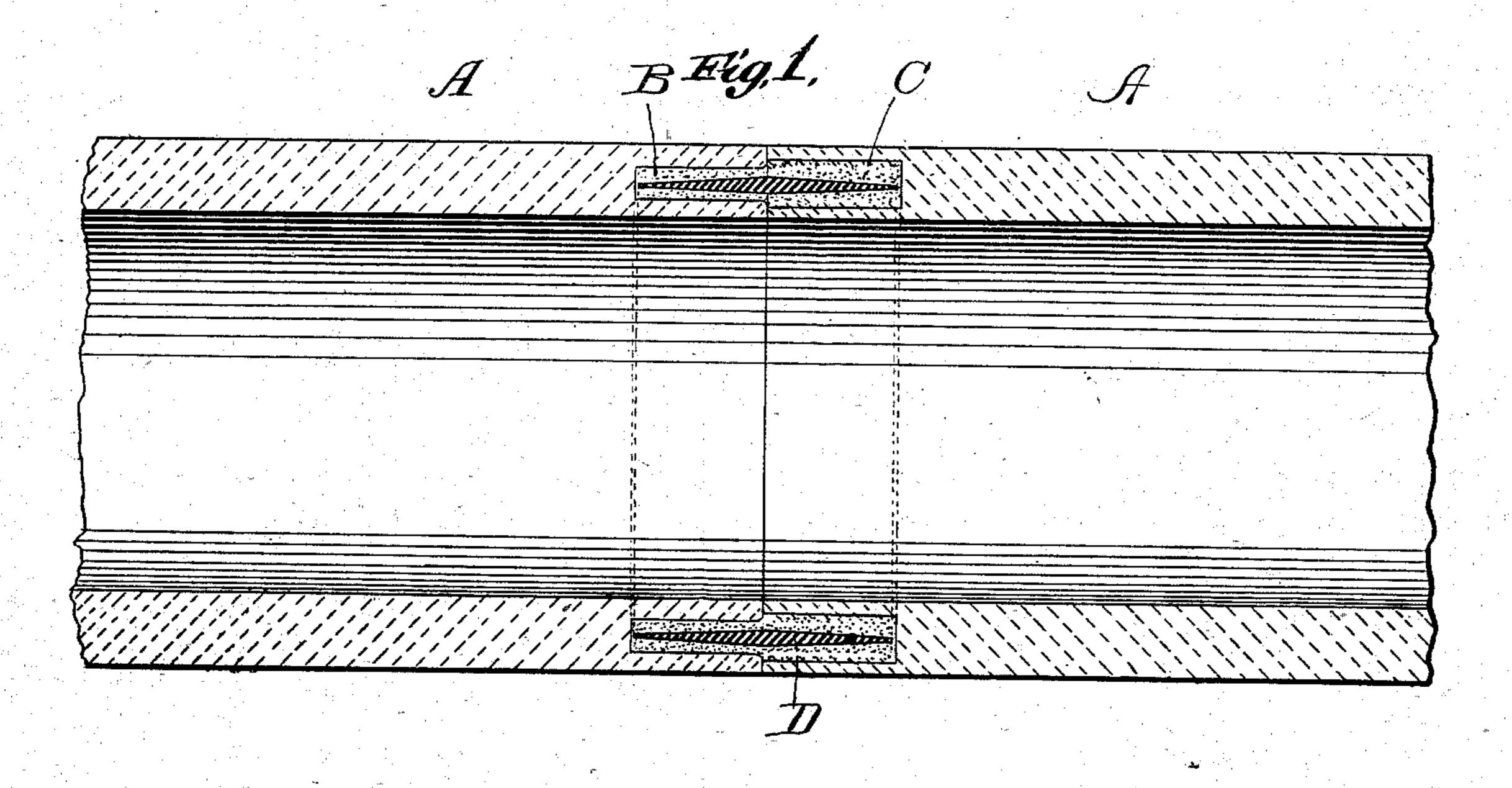
(No Model.)

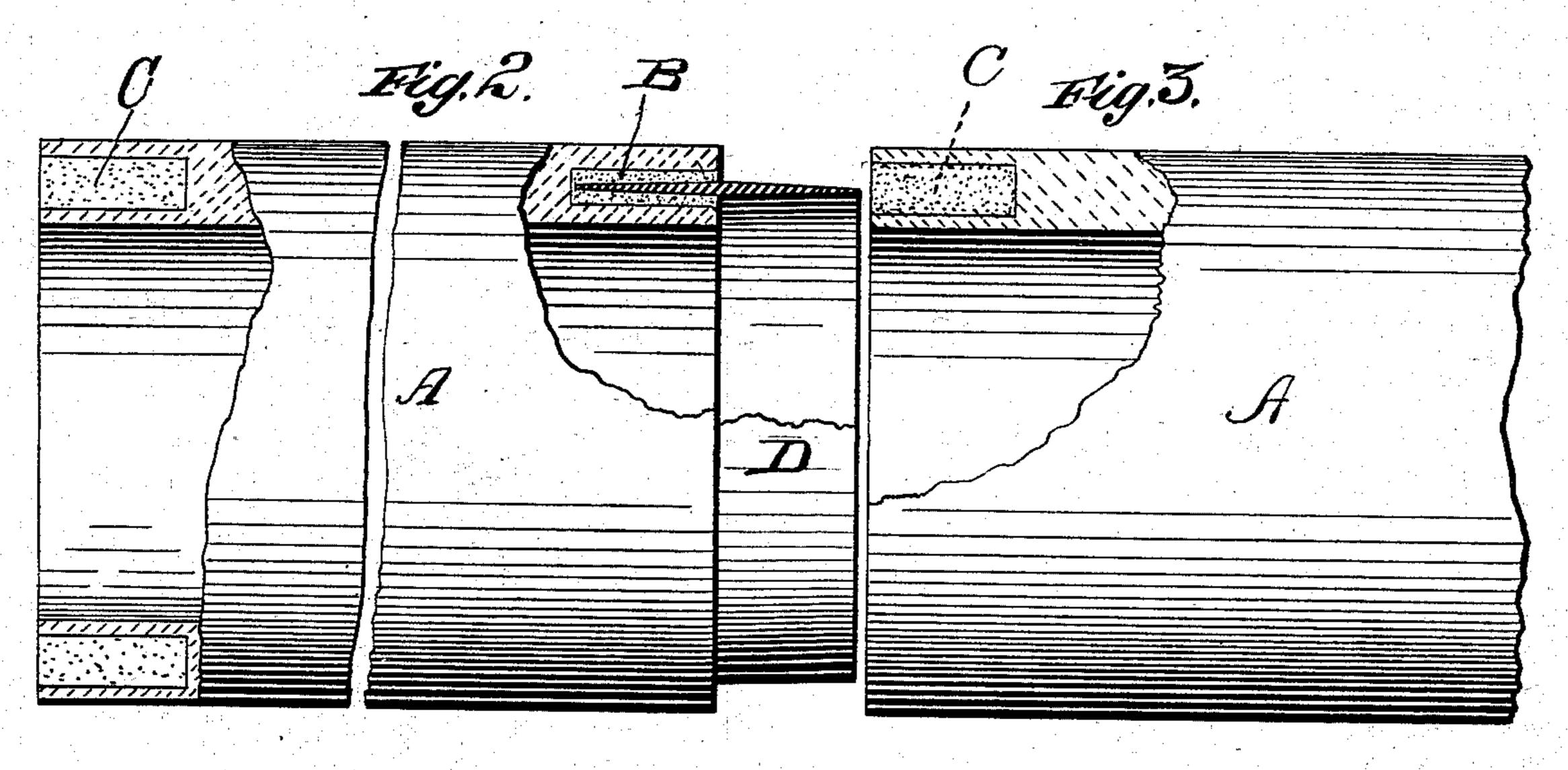
O. L. W. DIETZ.

PIPE JOINT.

No. 249,594.

Patented Nov. 15, 1881.





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## United States Patent Office.

OSWALD L. W. DIETZ, OF CINCINNATI, OHIO.

## PIPE-JOINT.

SPECIFICATION forming part of Letters Patent No. 249,594, dated November 15, 1881.

Application filed August 23, 1881. (No model.)

To all whom it may concern:

Be it known that I, Oswald L. W. Dietz, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and valuable Improvement in Pipe-Joints; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal section of my invention; and Fig. 2 is a side view, partly broken away, the ends of the pipes being separated.

This invention has relation to pipe-joints for sewer and drain pipes; and it consists in the novel construction and arrangement of the 20 ends of the sections of pipe, which are provided with annular recesses for the reception of the edges of an annular iron hoop, which is embedded in a composition of cement-putty, with which the recesses are filled previously to joining the sections, as will be hereinafter fully described, and pointed out in the claims.

Referring by letter to the accompanying drawings, A designates a section of clay pipe provided with an annular recess, B, in one end, 30 and a larger annular recess, C, in the other end, as shown in the drawings. The ends of the section are like or symmetrical, so that when they abut they come flush together, and the recesses are opposite each other, as shown 35 in Fig. 1. The recess B is to be first filled with cement-putty, and an iron hoop, D, having thin edges and thickened at its middle, has one of its edges forced into the putty in the recess B, the middle portion and the other 40 edge projecting, as shown. This iron hoop may be continuous, or it may be made in the form of a lap-ring. The recess C of another section

of pipe may be then filled with cement-putty,

the ends of the sections to be joined then

45 smeared with a coating of cement, and the sec-

tions forced together to cause the exposed end of the iron hoop to enter the mass of cement-putty in the recess C. The enlargement at the middle of the iron hoop will force the cement against the surrounding walls, thus making a 50 perfectly-fitting and tight joint. The hoop D will keep the sections of pipe in their relative positions, so that the cement may set undisturbed, and the cement will protect the iron hoop and prevent rusting of the same.

In order to strengthen the ends of the pipe to counteract the loss of material occasioned by the recesses B and C, the sections may be thickened at the ends; but this is not an essential feature, as the sections may be made 60 plain.

By this construction I secure a perfectly-fitting joint without the use of the bell or sleeve used in the ordinary construction.

The advantages of the invention are obvi- 65 ous. It is cheaper, more readily transported, and is easier to place in the trench.

The hoop D may be roughened to cause the cement to adhere, and it may also be coated with coal-tar, if desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a section of clay pipe having like or symmetrical 75 ends, each provided with a recess, one of which is larger than the other, as set forth.

2. In a pipe-joint for sewers and the like, the combination of the iron hoop D and the sections A, provided with the annular re-80 cesses B and C, filled with cement-putty, substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of witnesses.

OSWALD L. W. DIETZ.

Witnesses:

JACOB KUERSTEINER, N. MARCHANT, EMIL E. KUERSTEINER.