(Model.)

O. L. W. DIETZ.

Drain Tile Joint.

No. 233,483. **Patented Oct. 19, 1880.**

Fig. 1.

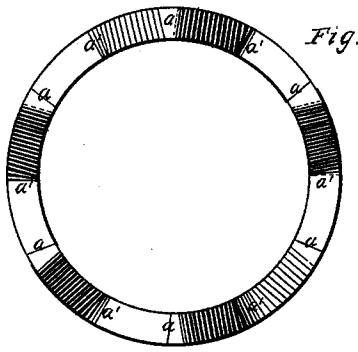


Fig. 4.

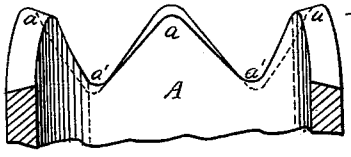


Fig. 3.

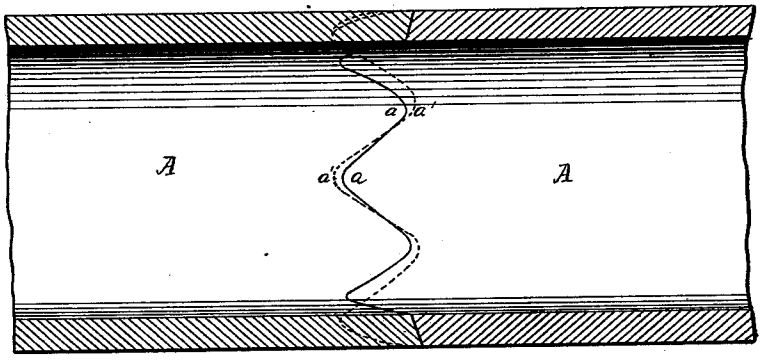
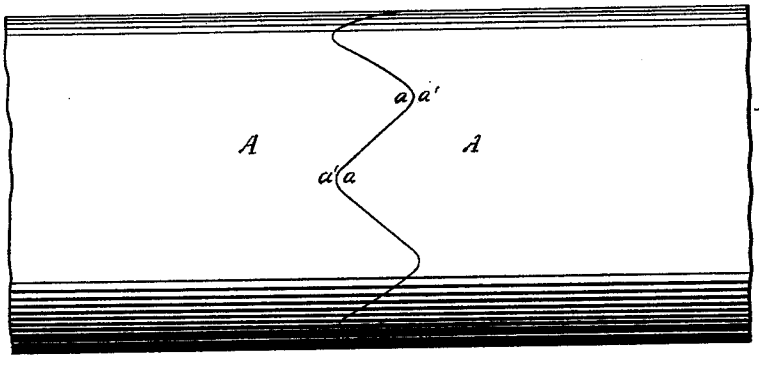


Fig. 2.



WITNESSES

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Philip Amasi.

INVENTOR

O. L. W. Dietz.

by E. W. Anderson

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N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

OSWALD L. W. DIETZ, OF CHATTANOOGA, TENNESSEE, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO F. E. TYLER, OF SAME PLACE.

DRAIN-TILE JOINT.

SPECIFICATION forming part of Letters Patent No. 233,483, dated October 19, 1880.

Application filed September 4, 1880. (Model.)

To all whom it may concern:

Be it known that I, OSWALD L. W. DIETZ, of Chattanooga, in the county of Hamilton and State of Tennessee, have invented a new and valuable Improvement in Drain-Tile 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 an end view of a section of pipe, showing this invention. Fig. 2 is a side view, showing the joint. Fig. 3 is a central longitudinal section. Fig. 4 is a detail view in section.

This invention has relation to joining drain and water pipes; and it consists in forming the sections of pipe at each end with alternate projections and depressions of angular form with rounded angles and edges beveled inwardly on the salient portions, and outwardly on the re-entering portions, so as to form a close fitting lock-joint when the sections are put together end to end, as hereinafter fully shown and described.

In the annexed drawings, the letter A designates two adjoining sections of pipe, each of which is formed at each end with alternate angular projections *a'* and depressions *a*, of similar angular form. The sides of these depressions and projections are made at about an angle of ninety degrees with each other, in order that they may possess sufficient strength, especially at the salient portions, and they are further strengthened by rounding the angular parts both at the ends of the projections and in the angles of the depressions. The edges of the projections and depressions are beveled inwardly, as shown in the drawings, and the projecting ends are also beveled inwardly; but the bottoms of the depressions, in which these depressions are fitted when the sections are put together, are beveled outwardly. In setting a line of pipe thus constructed the bottom of the excavation may be made level, there being no projections from the pipe in the form of sleeves for jointing. These sleeves are not needed with pipe-sections of this character, which are designed to be fitted together end to end, so that their outer and inner cylindrical surfaces coincide respectively, those of one section with those of the adjoining sections.

In order to make the joints water-tight they are luted or cemented, and in this manner a very effective and secure joint is obtained, the projections and depressions interlocking with each other to prevent vertical or lateral movement. The working length of each section is increased, there being no lapped or bell-form ends.

Each section is of the same diameter throughout its length, the projections at its ends being extensions of its cylindrical wall.

The sections are designed to be molded in form in order that the angular projections shall be solid and well formed.

What I claim, and desire to secure by Letters Patent, is—

The drain-pipe sections A A, having at each end interlocking angular projections *a'*, formed with rounded and inwardly-beveled ends and inwardly-beveled sides, and angular depressions *a*, formed with outwardly-beveled bottoms, and adapted to be fitted together end to end, as shown and described.

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

OSWALD LUDWIG WILHELM DIETZ.

Witnesses:
CHAS. PINNEY,
J. D. MILLER.