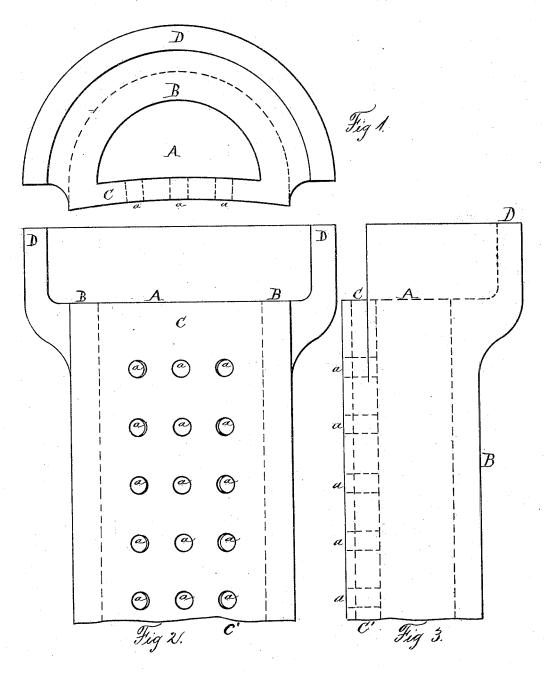
E. D. WEBB & J. STANLEY.

Drain-Pipe.

No. 212,773.

Patented Feb. 25, 1879.



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## UNITED STATES PATENT OFFICE.

EDWARD D. WEBB AND JAMES STANLEY, OF NEW YORK, N. Y.

## IMPROVEMENT IN DRAIN-PIPES.

Specification forming part of Letters Patent No. 212,773, dated February 25, 1879; application filed December 13, 1878.

To all whom it may concern:

Be it known that we, EDWARD D. WEBB and JAMES STANLEY, both of the city, county, and State of New York, have jointly invented an Improvement in Drain-Pipes, of which the following is a specification, taken in connection with the drawings, which form part thereof.

Our invention relates to pipes for draining purposes, generally made from plastic material and baked, but which may be made of any suitable material.

Its construction is clearly described in the following specification, and claimed at the end of this schedule.

In order that persons skilled in the art may make and use our invention, we will proceed to describe it, referring to the drawings, in which the same letters, wherever they occur, refer to like parts.

Figure 1 is an end view, showing a flange, for joining the pipes together, and the shape of the opening or channel through the pipe, and in dotted lines the perforations or filteringholes through its concave wall C. Fig. 2 is a plan view, with its perforated concave wall C uppermost, as it would be in use. Fig. 3 is a side view of the same.

A is the channel or opening through the pipe, its side walls being curved or converging to form the bottom wall. (Marked B.) C is the perforated top wall, concaved or depressed on its upper surface, and provided with filtering-perforations a a a, through which fluids enter the channel A. D is an offset-flange on wall B, extending beyond the end of the pipe proper, and of larger diameter or circle than wall B, to form a socket within the said offset to receive the smaller end C' of another pipe of similar construction to form a joint. I will call this the female end, and the smaller one the male end.

a a a are holes made through the concave wall C. It is made concave to cause all the water which falls on it from above, when the pipe is in the earth prepared for use, to flow toward them and into the channel A, and thence out of the pipe to any desired point.

Operation: The pipes are laid in the ground or material to be drained with the wall B downward and the concave upper surface of wall C uppermost. The male or smaller end C' of one pipe is placed within the female end of another pipe, or into the offsetting-flange D, and packed with cement or plastic material, if desired, bringing their upper surfaces, C, about flush with each other. More pipes are added until the length required is secured. Pebbles or broken stones are thrown upon the upper surface of C', and then finer material, if desired. Water above percolates onto the concave surface C, and is directed toward and through the perforations in its surface to channel A, through which it passes off.

The concave surface of C is an important feature, and a characteristic one of our invention. It secures more perfect drainage.

We do not claim a pipe constructed with a perforated top, as patented in England, No. 2,898 of 1867, and used for irrigation purposes.

Having now fully described our joint invention and the manner in which we have embodied it, what we claim, and desire to secure by Letters Patent, is—

The drain-pipe described, having a concave upper surface provided with perforations to conduct the surface-water into said pipe, and constructed substantially as shown and described, for the purposes set forth.

EDWARD D. WEBB. JAMES STANLEY.

Witnesses:
M. M. Robinson,
Jno. E. Ellison.