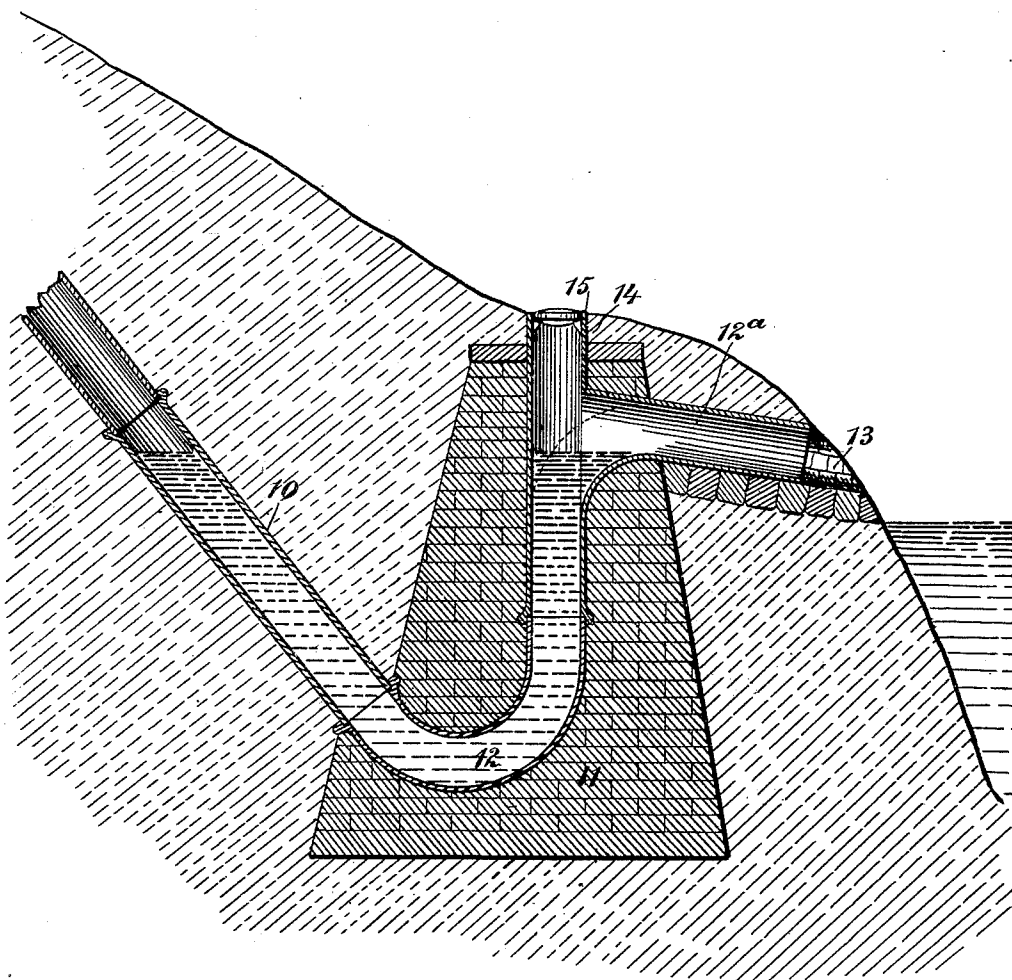


(No Model.)

J. H. ELLIOTT.
OUTLET FOR DRAIN PIPES.

No. 458,950.

Patented Sept. 1, 1891.



WITNESSES:

J. M. Ardle.
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JAMES H. ELLIOTT, OF MEMPHIS, TENNESSEE.

OUTLET FOR DRAIN-PIPES.

SPECIFICATION forming part of Letters Patent No. 458,950, dated September 1, 1891.

Application filed March 2, 1891. Serial No. 383,357. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. ELLIOTT, of Memphis, in the county of Shelby and State of Tennessee, have invented a new and Improved Outlet for Drain-Pipes, of which the following is a full, clear, and exact description.

My invention relates to improvements in outlets for sewers and other drain-pipes. A great deal of difficulty is experienced in arranging sewers and other drain-pipes to empty into rivers owing to the treacherous nature of the river-bank, as the bank is continually washing away, thus damaging the pipes.

The object of my invention is to obviate this difficulty by producing an outlet for pipes of the character described which will be self-cleaning and which will cause the water to flow gently from the pipes, so that it will have no serious washing effect.

To this end my invention consists in certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which the figure is a sectional view of an outlet embodying my invention.

The main drain-pipe 10 is laid at an incline in the river-bank, as shown in the drawing, and when it reaches the bank it is made to enter an abutment 11, of masonry or concrete, and is given an upward bend, as shown at 12, so as to extend upward to a point near the top of the masonry, and it is then again bent outward, as shown at 12^a, so as to deliver into a paved gutter 13, which is located in the river-bank above low-water mark. The pipe thus makes an S-bend. The main pipe above the bend 12 is provided with a branch 14, which extends vertically through the masonry and above the soil, where it is provided with a removable cover 15, although a grating may be substituted if desired, and the branch pipe thus forms a man-hole through which the outlet can be inspected and which enables it to be easily reached and cleaned in case it should become permanently clogged.

By having the outlet bent in the manner directed the bent portion will always be full of water, as indicated by the broken lines in the drawing, and this water will form a cushion, so that when the drain-water comes rushing down the main pipe it will strike this cushion, which will check its flow, so that the water will flow gently out of the upper end 12^a of the pipe into the gutter 13 and from thence into the river. By mounting the outlet in a solid wall of masonry or concrete it is held permanently in place. The pipe will not be easily clogged, but if the bent portion does become somewhat clogged a sufficient head of water will accumulate in the upper portion of the pipe, so that it will eventually force the material in the bend out through the end of the pipe.

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

1. An outlet for pipes of the character described, which consists of a bent pipe mounted in a support, the lower end of the pipe being arranged to connect with the main pipe and the upper end opening from the support, substantially as shown and described.

2. An outlet for pipes of the character described, comprising a supporting-wall built in the bank of the stream and a pipe having an S-bend therein, the said pipe being mounted in the supporting-wall and having its lower end adapted to connect with the main pipe, its upper end opening from the upper portion of the supporting-wall and having a man-hole in the top, substantially as described.

3. An outlet for pipes of the character described, comprising a pipe having an S-bend therein and having a man-hole in the top, said pipe being mounted in a supporting-wall and having its lower end adapted to connect with the main pipe and its upper end opening into a gutter, substantially as described.

JAMES H. ELLIOTT.

Witnesses:

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GUS C. ENGSTFELD.