I. Birkinshaw,

Sewer Pipe . No. 81,911.

Patented Sep. 8. 1868.

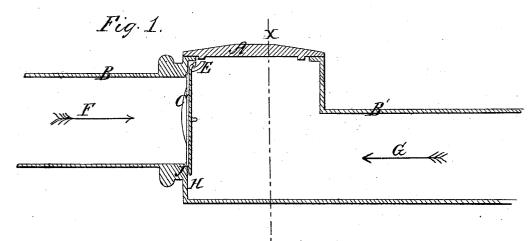
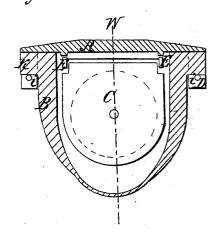


Fig. 2.



Witnesses; D'Harry Hammer, Bathrok.

Inventor; Thur Birthenshaw

Anited States Patent Office.

CHARLES BIRKINSHAW, OF CHICAGO, ILLINOIS.

Letters Patent No. 81,977, dated September 8, 1868.

IMPROVED SEWER-PIPE.

The Schedule referred to in these Netters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES BIRKINSHAW, of Chicago, in the county of Cook, and State of Illinois, have invented a new and improved Method of Constructing Sewer-Pipes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a new and improved method of constructing sewer-pipes, so as to

prevent water, gas, and impure air from passing back into cellars or basements from the main sewer.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure I represents a section, taken through the red line W in Fig. II.

Figure II represents a section, taken through Fig. I, at red line X.

B B', in Fig. I, represent the sewer-pipe running from a cellar or basement into the main sewer, the current passing through the pipe in the direction shown by dart F.

A represents a cap or cover, by means of which the chamber in sewer B B' is made accessible.

C is a valve, swinging upon hinge E at the top, and resting against projection J at the bottom. This valve is easily opened by any water from the cellar or basement in the direction as shown by the dart F, and closed perfectly tight by the force of any water, air, or gas forming a back current, as shown by dart G.

One of the pipes, B', is made lower than the other, as shown by letter H in Fig. I, to prevent the sediment

from interfering with the working of valve C.

B, in Fig. II, represents the chamber in which valve C is made to work, as seen in Figs. I and II. D shows projections downward on the cap or cover A, and are made to pass through the flanges of the

chamber K, and are fastened by pins i, as seen in Fig. IT.

What I claim as my invention, and desire to secure by Letters Patent, is-The combination of the chamber B, pipes B B', and valve C, arranged substantially as and for the purpose CHAS. BIRKINSHAW. set forth.

Witnesses:

D. HARRY HAMMER,

P. C. LATHROP.