

E. J. VERRUE.
Hydraulic Waste-Pipe Cleaner.

No. 221,483.

Patented Nov. 11, 1879.

FIG. 1.

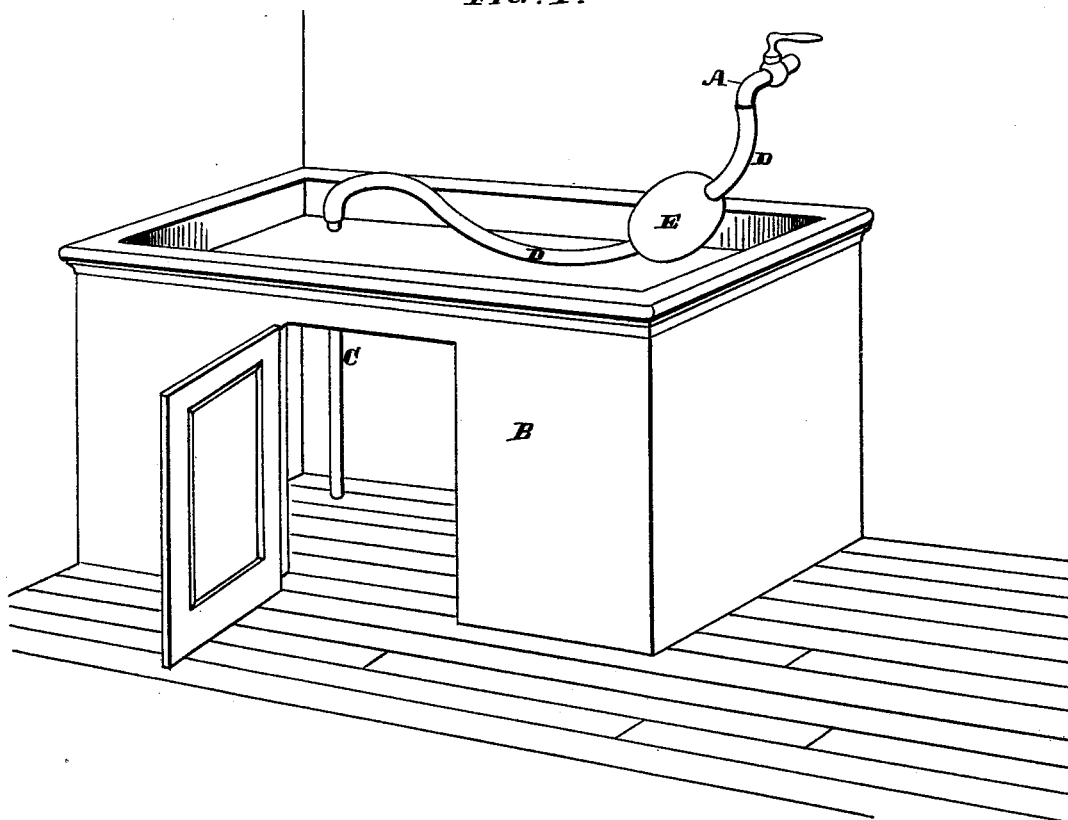
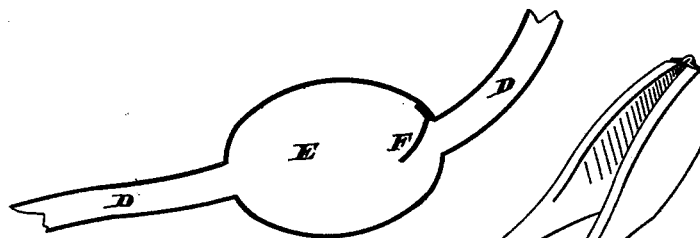


FIG. 2.



WITNESSES

Frank A. Brooks
J. H. Brown

INVENTOR

FIG. 3

Ernest J. Verrue
By Dewey & Co.,
Attys

UNITED STATES PATENT OFFICE

ERNEST J. VERRUE, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN HYDRAULIC WASTE-PIPE CLEANERS.

Specification forming part of Letters Patent No. **221,483**, dated November 11, 1879; application filed August 19, 1879.

To all whom it may concern:

Be it known that I, ERNEST J. VERRUE, of the city and county of San Francisco, and State of California, have invented a Hydraulic Waste-Pipe Cleaner; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to a novel hydraulic waste-pipe cleaner; and it consists in the employment of the pressure which is present in the water mains and pipes, and in a means for making a direct communication between the service-cocks and the waste-pipe, whereby the pressure of the water-pipe is transmitted to the waste-pipe, and this pressure is enhanced to any desired extent, as will be more fully described by reference to the accompanying drawings, in which—

Figure 1 is a view of my device. Fig. 2 is a sectional view. Fig. 3 is a view of the compression-tongs.

Considerable difficulty has been experienced in keeping sink and waste-water pipes clear, and when they become stopped up resort is made to force-pumps to clear them out.

In most cities and towns water is supplied under pressure through pipes, and the service-cocks in the houses are usually placed in close proximity with the waste-pipes.

My invention consists in a device for uniting the service-cock with the waste-pipe, so that the pressure from the former may be utilized and increased for the purpose of removing any material with which the pipe may be clogged.

A is the service-cock. B represents a sink, and C is the waste-water discharge-pipe. D is a flexible rubber or other suitable elastic hose or jointed pipe having sufficient strength to resist the pressure of the water. This pipe is fitted with a proper coupling, so that it may be easily united to the service-cock, and the opposite end is inserted into or united with the waste-water pipe C.

By turning on the water from the service-

cock the pressure in the water-pipe will be transmitted directly to the waste-pipe, and the latter will be cleared of any ordinary obstruction.

In order to increase the pressure when necessary, and make it possible to force out any obstruction, I form an enlarged chamber at E, into which water may flow. A valve, F, opens downward into this reservoir, but closes to prevent any water from returning into the service-pipe. The chamber E is preferably made elastic, or so formed that it may be compressed or diminished in size, and the water forced out of it by means of a sort of compression-tongs, which are fitted to seize the ball or reservoir and compress it. The valve F prevents the water from returning into the service-pipe, and it is thus forced into the waste-pipe with a powerful pressure, thus relieving the pipe of any stoppage.

This device is applicable to sinks, water-closets, and waste pipes or passages of all descriptions.

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

1. The flexible or jointed pipe D, with its reservoir or enlargement E, and the valve F, in combination with the service or water pipe A, the waste-pipe C, and a means for compressing the water within the chamber E, substantially as and for the purpose herein described.

2. The method of applying pressure and relieving stoppages in waste-pipes, consisting in connecting the service-pipe with the waste-pipe by means of the flexible or jointed pipe D, substantially as herein described.

In witness whereof I have hereunto set my hand.

ERNEST J. VERRUE.

Witnesses:

S. H. NOURSE,
FRANK A. BROOKS.