

United States Patent Office.

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IMPROVEMENT IN PRIVIES.

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

I, WILLIAM JACOB WARREN, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improvement in Privies, of which the following is a specification.

Nature and Object of the Invention.

My invention consists of a privy-well or chamber, communicating with the waste-pipe of a hydrant, or with other water-pipes, and with a pipe leading to a sewer, and provided with a valve, as fully described hereafter, so that the waste water from the hydrant may be used to dilute the refuse in the well, and thus prevent the generation of noxious gases, and so that there may be a free discharge of the contents of the well into the sewer; the main object of my invention being to afford a cheap and cleanly substitute for expensive water-closets.

My invention further consists of an arrangement of pipes, described hereafter, in respect to the said well, whereby the gases generated in the well or in the sewer are prevented from passing to the waste-pipe.

My invention also consists of a curved pipe, arranged in the well and communicating with the overflow-pipe, so as to prevent the choking of the latter.

The figure in the accompanying drawing represents, in section, my improved privy-well and its adjuncts.

General Description.

A is a seat, suitably arranged within a privy or out-house, and provided with a basin, *a*, and discharge-pipe, *b*.

B is the waste-pipe of a hydrant, situated near the privy, and communicating with a well or chamber, C, with which the pipe *b* has also a direct communication.

A tube, *c*, extends from the upper part of the chamber C to the surface of the ground, and is provided with a cap, *d*, the said tube inclosing the upper end of a rod, D, secured at its lower end to a valve, *f*, adapted to the mouth of a pipe, F, leading from the lower part of the chamber to an adjacent sewer.

An overflow-pipe, G, forms a communication between the discharge-pipe F and the well, the pipe communicating with the well at such a point that the latter can always retain a plentiful supply of water.

To prevent the choking of the pipe G with paper, &c., floating in the well, I bend it downward therein, as shown at *x*.

Ordinary privy-wells of cheap houses have no other outlet than that through which the soil is dropped, so that the noxious gases which rapidly generate in consequence of the absence of water, are compelled to pass upward into the privy, whence they are disseminated throughout the neighborhood.

Water-closets afford a remedy for this evil, but to houses of the cheaper class, and to dwellings of the poor, water-closets are adjuncts of too expensive a character; and it is for houses of this class that my invention has been more especially designed, although my plan may be adopted in any locality where a supply of water exists, and where a privy free from noxious exhalations is desirable.

The soil is received by the well or chamber C, which is also a receptacle of the waste water flowing from the hydrant through the pipe B.

The valve *f* remains closed. The water from the hydrant and washings from the yard and kitchen collect in the well, where the water prevents the exhalation of noxious gases.

Before the contents of the chamber become foul the valve *f* should be raised, when the water will at once rush through the pipe F, carrying with it the soil and other offensive matter.

The overflow-pipe G is so situated as to prevent the water from rising too high in the well, and the pipe B communicates with the well at such a point that the water therein acts as a trap to prevent the gases in the well or sewer from passing upward through the said pipe.

It will be seen that my improvement is effectual even where there is a limited and unfrequent flow of water through the waste-pipe, as, by keeping the valve *f* closed, sufficient water may be maintained in the well to dilute its contents, the necessity of employing the usual expensive water-closets and the array of pipes connected therewith being thus avoided.

It will be apparent that the waste-pipe may communicate with the discharge-pipe of a bath-tub, or with a drain-pipe or water-spout.

Ordinary privy-wells and their communications afford lodgments for rats, which, as will be readily observed, cannot avail themselves of the well and pipes described above for lodgments or communications with the house.

Claims.

1. The combination of the tube *b* and a receptacle, C, receiving water from a waste-pipe, B, communicating, through a pipe, F, with a sewer, and provided with a valve, *f*, all substantially as described.

2. The arrangement, substantially as set forth, of the chamber C and pipes B, F, and G.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM JACOB WARREN.

Witnesses:

JNO. B. HARDING,
FRANK B. RICHARDS.