W. DONOVAN.

SINK.

No. 171,002. Patented Dec. 14, 1875.

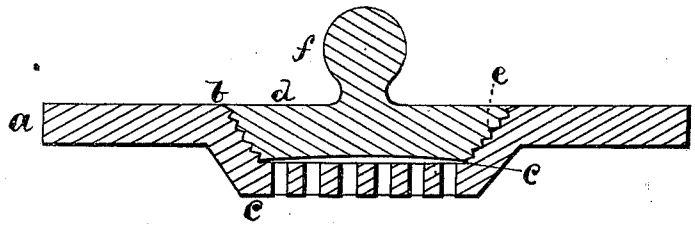

Fig. 1.

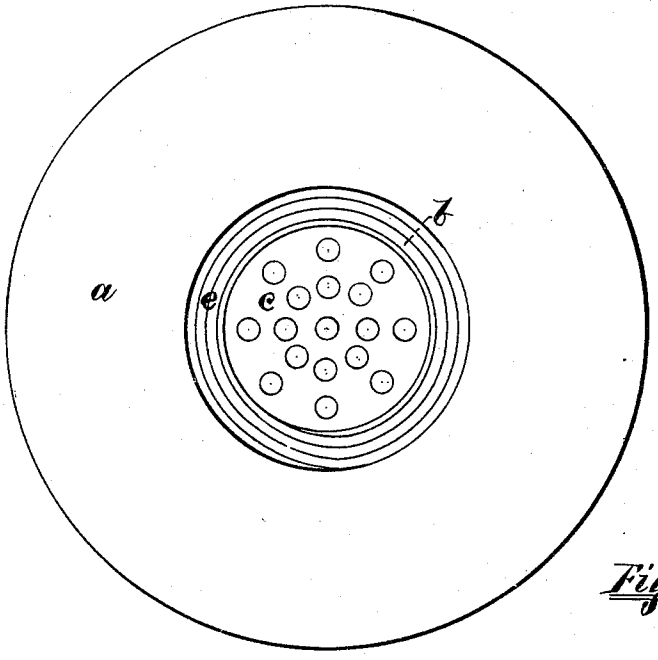

Fig. 2.

Witnesses:

Wm. M. Reed

Henry Elmer

Inventor:

William Donovan.

per John Ingle Jr. Atty

UNITED STATES PATENT OFFICE.

WILLIAM DONOVAN, OF NEW YORK, N. Y.

IMPROVEMENT IN SINKS.

Specification forming part of Letters Patent No. **171,002**, dated December 14, 1875; application filed September 15, 1875.

To all whom it may concern:

Be it known that I, WILLIAM DONOVAN, of the city, county, and State of New York, have invented a new and useful Improvement in Stench-Traps for Sinks, of which the following is a specification:

The object of my invention is to more effectually prevent the rising or return of smells or effluvia from the waste-pipe; and my invention consists of two parts: first, a strainer-plate, having a depressed center, in the bottom of which are the strainer holes or perforations, and the sides of said depression sloping at an angle suitable, and provided with a thread, into which it is intended to screw the stopper or second part of the invention. The strainer-plate is secured to the bottom of sink, and cemented all around its outer rim, and its sunk center fitting into the upper end of waste-pipe.

The second part of the invention consists of a stopper having at its top a knob or handle, by which it may be turned around, and all around its flat, at the outer edge, a thread cut or formed, and said edge also made to an angle corresponding to angle of strainer-plate, into which it is screwed when requisite to shut off the effluvia. It closes completely the inlet to the waste-pipe. Its outer lower edge fits down tightly against bottom of depression of strainer-plate when screwed in place. Its bottom is dished upward slightly, but this is not material. The thread makes several turns around the stopper, and as it fits closely into the thread of the strainer-plate acts as a cut-off entirely preventing the escape of effluvia or noxious gases from the waste-pipe below, while at the same time it is readily removable when desired, and, when removed, offers no obstruction in the bottom of the sink. Neither does it provide an opening through sink, likely to leak.

I am aware that a valve has been patented for the same purpose, which is pivoted to bottom of sink, and has a lever or arm stretching from pivot to valve proper, and is arranged to be turned away from the strainer off and on, when desired; and I believe that the same is a very imperfectly-operating device, as it does not perfectly shut off the mouth of waste-pipe. The pivot is peculiarly liable to work loose, and a packing is required to the valve, which also is defective in my opinion, as it soon becomes uneven, and thereby leaves space open for escape of gases. It also is an obstruction in bottom of sink, rendering it almost, if not quite, impossible to keep the sink clean, and it also prevents free use of sink for many purposes—washing dishes, &c.

My invention is always tight, when desired, and, when removed, offers no obstruction in bottom of sink, allowing the sink to be used freely for any purpose to which the sink may be found useful.

I do not consider my invention a valve, as the stopper is not permanently attached, and no hinging or pivoting used. The valve before alluded to must have a hole formed in the bottom of the sink, through which it is pivoted; and as the pivot works loose from excessive use leakage results—a defect not in mine.

Figure 1 is a vertical section. Fig. 2 is a top view of strainer-plate.

a represents strainer-plate; *b*, the depression; *c*, the bottom of depression, having perforations for escape of water, &c. *d* is the stopper; *e*, the threads, and *f* the handle, affording ready means of turning. When the stopper is in place the apertures in bottom *c* are completely covered and effluvia totally excluded, and no leakage possible.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

In combination with a strainer-plate, *a*, provided with a threaded depression, *b*, the stopper *d*, provided with threads *c* and handle *f*, as and for the purpose described and set forth.

WILLIAM DONOVAN.

In presence of—
JOHN INGLIS, Jr.,
WM. W. REED.