

Stevenson Towle's Sewer Trap.
Plate 1

116645

Fig. 1

PATENTED JUL 4 1871

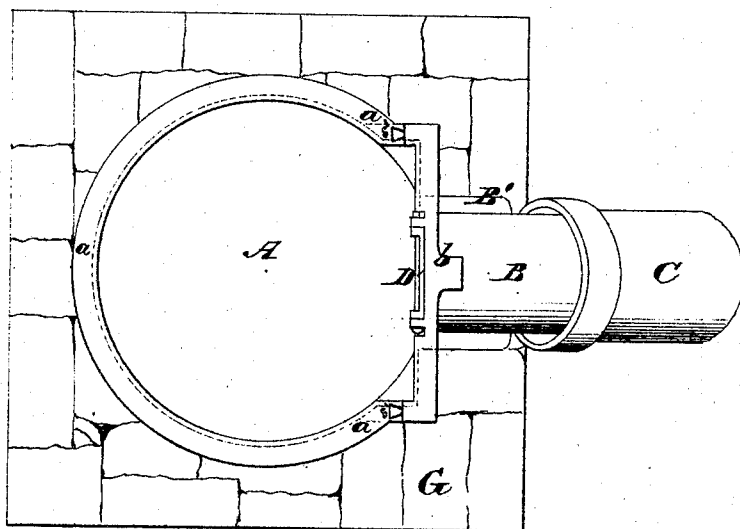
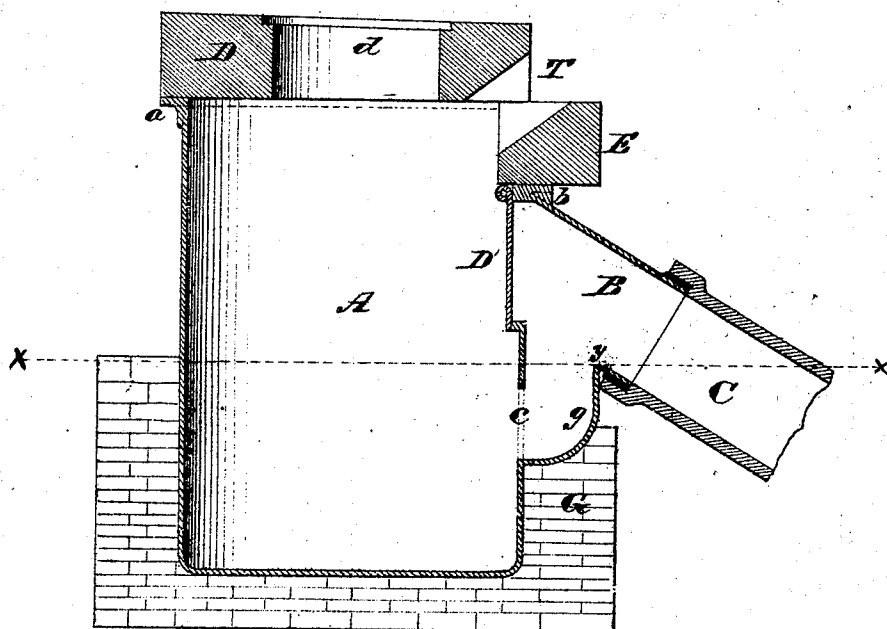


Fig. 2



Witnesses.
R. H. Campbell
J. N. Campbell

Inventor
Stevenson Towle
by
Mar. Perinck & Lawrence

Stevenson Towle's Sewer Trap

Plate 2.

Fig. 3

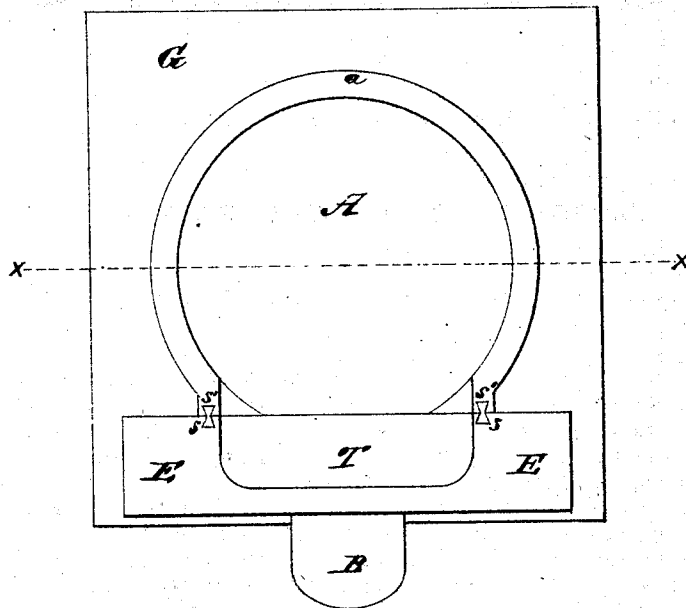
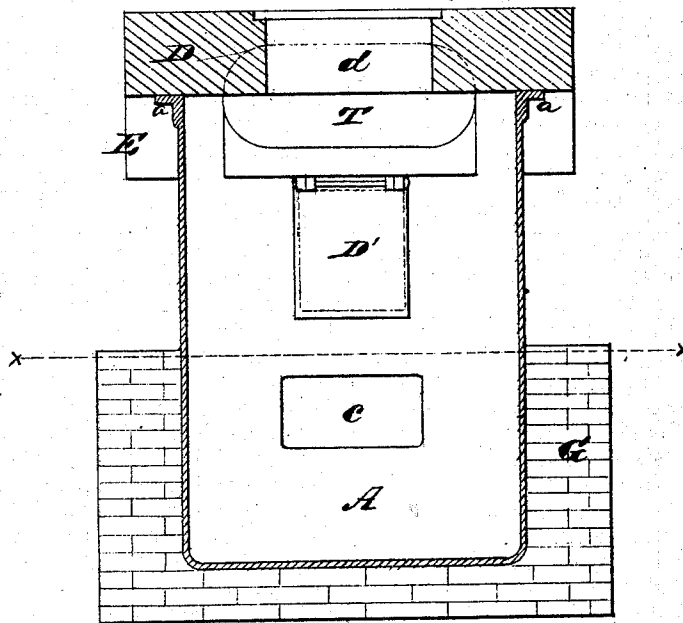


Fig 4



Witnesses.
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UNITED STATES PATENT OFFICE.

STEVENSON TOWLE, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWER-TRAPS.

Specification forming part of Letters Patent No. 116,645, dated July 4, 1871.

To all whom it may concern:

Be it known that I, STEVENSON TOWLE, of the city of New York, in the county and State of New York, have invented a new and Improved Sewer-Trap; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1, plate 1, is a top view of the trap set in masonry with the covering slabs removed. Fig. 2, plate 1, is a diametrical section through the trap complete. Fig. 3, plate 2, is a top view with one of the slabs adjusted in place. Fig. 4, plate 3, is a diametrical section, looking toward the trap-throat and valve.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of my invention consists, 1st, in a basin, which is made, instead of with an obstruction diaphragm between its sides, as heretofore, with two passages through one of its sides, a lateral extension-nozzle chamber in communication with the chamber formed by the said basin, and a movable valve covering the upper one of said passages, all in such a manner that no portion of the chamber formed by the basin is occupied, as usually, with a stationary diaphragm, and, therefore, full room for the sewer-trap cleaner to work in is afforded, and, at the same time, a very effectual stench-trap (the valve serving this purpose) is produced, and also greater freedom for out-flowing matters and for cleaning out the throat or nozzle is afforded. It consists, 2d, in a depressed seat with dovetail recesses in its vertical shoulder formed on the basin, said seat receiving and supporting the drip-stone, and its recesses receiving dovetail tenons for fastening the stone in place.

To enable others skilled in the art to understand my invention, I will explain its construction and operation.

In the accompanying drawing, A represents a basin, which may be made of cast-iron or of any other suitable material, and which has a flange, *a*, formed on its upper end. This basin is preferably made of a cylindrical form, with a closed bottom and open top, and also with a portion, *b*, of it depressed the thickness of the drip-stone E, so that when the stone D is applied in its place it will have a support and fit snugly upon the top of the basin and top of the said stone E, as shown in Fig. 2. In the vertical shoulder of the

depressed seat *b* of the basin dovetail recesses *s' s'* are formed and corresponding recesses cut in the stone, so that when the stone is seated, it may be confined in position against lateral displacement by dovetail tenons *s s*, as represented in Fig. 3; or, instead of separate tenons, the tenons may be formed on the stone or grooves formed in the stone, and dovetail tenons to fit the same formed on the vertical shoulder of the depressed seat of the basin. Through the stone D a man-hole, *d*, is formed, which is covered with a suitable plate, and through the joint, at the juncture of the two slabs D E, is the mouth T, for the flow of fluids from the gutter into the basin. The basin A is set into masonry G, substantially as shown in the drawing, and, if desirable, brackets or offsets may be constructed upon its external surface for staying, bracing, and supporting it. On one side of the basin A, between its top and bottom, are two outlets, which lead into an offset chamber B, *g*. The upper outlet is provided, inside or outside of the basin wall, with a valve, D', which may be hinged, as described, and which is secured when shut by a suitable fastening, so as to prevent any escape of offensive gas from said chamber B *g*, and which can be swung open when it is desired to obtain access to this chamber for cleaning it out. The lower outlet *c* leads into the lower portion *g* of the offset below an overflow point, *y*, so that, while the fluids can escape from the basin above the level indicated by dotted line *x x*, gases cannot pass back through the outlet *c*. The upper portion B of the offset chamber forms a nozzle which is directed downward toward the street-sewer and adapted to receive a discharge-pipe, C, which conducts the fluids from the basin down into the said sewer.

It will be seen from the above description that I have formed, on one side of the basin A, a trap which, while it will allow fluids to escape freely from this basin, will effectually prevent the return from the sewer of unpleasant and unhealthy odors, and, while this is the case, free access is allowed to the interior of the trap for cleaning it of any accumulations.

I am aware of the contrivances shown and described in the patents granted to Thomas Dart, June 29, 1869, and W. H. Short, April 9, 1861; and, also, of the devices shown and described in the rejected case of Wm. McArthur and T. E.

Stuart, April 21, 1868; and I do not claim anything therein set forth as my invention.

It will be seen that the water-line rises above the passage for the outlet of fluids from the basin A, and that the hinged door D is used to afford access to the nozzle B *g* outside of said basin for cleaning out. By these means noxious gases are prevented from escaping into the basin from the conduit C. It is obvious that if the passage *c* were closed, and the fluids conducted through the opening closed by the door D, the noxious gases would escape into the basin A whenever the said door was open. By my plan the door D may be sealed tight, as the outlet *c* is beneath it, and closed by the rise of the fluid above it, as indicated in Fig. 2.

I am further aware that sewer-traps have been constructed with a diaphragm which serves as a gas-trap by dipping down into fluid in the basin. Such a diaphragm is shown in the English patent of Simmonds, No. 2,973, for the year 1863; but I

am not aware of any sewer-trap which has the peculiarities of construction which I claim.

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

1. The metallic basin A, constructed with two passages in one of its sides, a lateral extension-nozzle chamber B *g* in communication with the chamber formed by the basin A, and a movable valve, D, covering the upper one of said passages, all arranged and operating substantially in the manner and for the purpose described.

2. The depressed seat *b* for the stone E, formed on the basin A, in combination with the dovetail recesses formed in the basin for receiving tenons to fasten the stone in place, all substantially in the manner and for the purpose described.

STEVENSON TOWLE.

Witnesses:

C. W. SHEPHERD,
DE WITT C. GRAHAM.