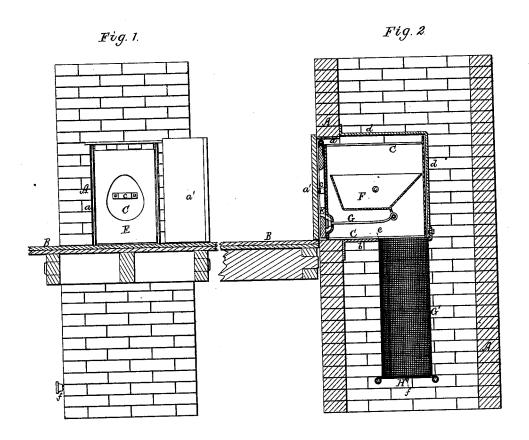
C. M. KIMBALL. Apparatus for the Manufacture of Manure from Night Soil.

No. 200,731.

Patented Feb. 26, 1878.



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UNITED STATES PATENT OFFICE.

CHARLES M. KIMBALL, OF BRADFORD, MASSACHUSETTS.

IMPROVEMENT IN APPARATUS FOR THE MANUFACTURE OF MANURE FROM NIGHT-SOIL.

Specification forming part of Letters Patent No. 200,731, dated February 26, 1878; application filed January 4, 1878.

To all whom it may concern:

Be it known that I, CHARLES M. KIMBALL, of Bradford, of the county of Essex and State of Massachusetts, have made a new and useful Invention for Drying and Deodorizing Fecal and Urinary Matters for rendering such useful as fertilizers; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which-

Figure 1 is a front elevation, and Fig. 2 a vertical section, of a flue or chimney and appliances constituting or embracing my said invention, which, besides the purposes above named, is designed to answer that or those of

a privy or water-closet.

In carrying out my invention I combine, with a chimney or flue for the discharge of the smoke and waste gaseous products of combustion, a fire-place, a suitable perforated seat for a person, and devices for receiving from such person fecal or urinary matters when discharged from said person, and conveying them into such chimney or flue, or into a chamber from which such flue or chimney may lead, in order for them to be exposed therein to the smoke or heated current or currents flowing through such chimney or flue, and by said smoke or heated current be desiccated and deodorized, and thereby rendered useful as a fertilizer, the odors and aqueous vapors arising from such fecal or urinary matters being carried off into the atmosphere by such chimney or flue.

From the above it will be seen that I have a new and useful substitute for what is usually termed a "privy," "earth-closet," or "watercloset," over which my invention has peculiar hygienic and other advantages, for it serves to carry off into the external atmosphere all odors arising from the fecal or urinary deposits. It saves the appliances and expenditure of water necessary to the working of a watercloset. It also avoids the discharge of the fecal and urinary matters into sewers, and thence into a river, harbor, or the sea, and the bad effects incident thereto. It avoids all the evil results of a common privy, and is far preferable to the ordinary earth-closet.

one of the floors of the building to which such chimney may be supposed to belong.

Directly above the floor, or even therewith, is an opening, a, into the chimney, which opening may be provided with a door, a'.

A platform, b, is extended within the chimney, on or about on a level with the floor, there being between the end of the platform and the inner wall of the chimney a space or spaces for the free passage upward past the platform of the smoke or volatile products of combustion received into the chimney. A drawer-frame or carriage, C, provided with a privy-seat, E, is placed on the platform. Such drawer-frame or carriage has within it and pivoted to it a reversible pan, F, provided with a rod, G, for turning or partially revolving it, in order to effect a discharge from it of any deposits. The seat at its front end is hinged to the box, in order to be capable of being turned from its horizontal position on the top of the box over and vertically down in front of the box. Furthermore, there is a handle, c, to the box. The seat is like that of a com-

mon water-closet or privy.

A bent standard, d, erected on the platform and within the chimney, as shown, serves to limit the movement of the fecal-receiver box

or carriage into the chimney.

Within the chimney, and extending down from the platform, is a perforated or foraminous tube, G', made of woven wire or other suitable material. The platform has an opening, e, leading into the tube G', and such tube is open at bottom, and has attached thereto a perforated valve or slide-door, H, by which it may be opened and closed. A stem or rod, f, from this door extends through the side of the chimney, the door being supported by suitable cross-bars.

From the above it will be seen that on opening the door a' the drawer C may be drawn out of the chimney, after which the privy-seat may be turned up into a horizontal position over the receiver or pan F, which having been accomplished, the whole will be ready for use. After a person may have sat upon the drawer or seat, and discharged into the pan fecal or urinary matters, or both, the seat should be In the drawings, A represents a fire-place turned down, the drawer slid back within the chimney, or an enlargement thereof, and B chimney, and the pan should be turned so as to discharge its contents into the desiccating and deodorizing tube G', wherein they will be exposed to the smoke and heated air and gaseous products of combustion that may be passing from the fire-place up through the chimney, and thereby will be dried and more or less deodorized.

After the tube G' may have become sufficiently charged with the deposits, and the latter may have been suitably subjected to the action of the currents of smoke, hot air, and gases, the said deposits may be dumped to the lower part of the chimney, from which they may be removed through a suitable opening therein.

Having thus described my invention, what I claim as such is as follows:

1. The combination of a fire-place chimney or a passage to receive and discharge smoke or volatile products of combustion therefrom, with a drawer provided with a privy-seat, and applied to such chimney or passage so as to be movable into or out thereof, all substantially as and for the purpose specified.

2. The combination of a fire-place chimney or a passage to receive and discharge smoke or volatile products of combustion therefrom, with a drawer provided with a privy-seat and a reversible pan, and applied to such chimney or passage so as to be movable into and out of such, all being substantially as and for the purposes as set forth.

3. The stop d, combined with the platform and the chimney arranged therewith, and provided with the drawer, as and for the purpose

set forth.

4. The combination of the perforated or foraminous tube G' and its door H with the chimney A and its drawer C, all being arranged and applied substantially as and for the purposes specified.

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Witnesses:
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