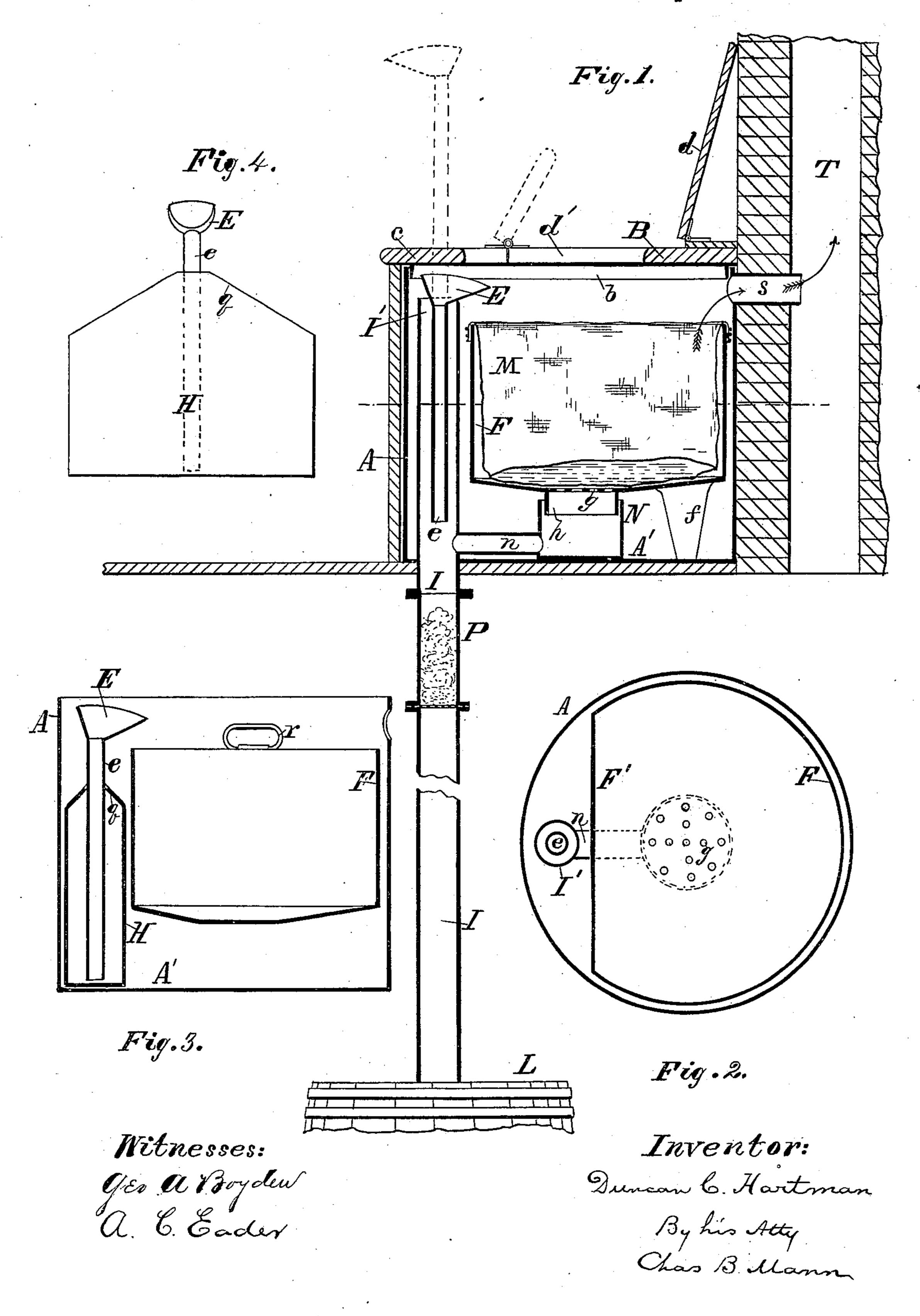
D. C. HARTMAN.

COMMODE.

No. 246,881.

Patented Sept. 13, 1881.



United States Patent Office.

DUNCAN C. HARTMAN, OF BALTIMORE, MARYLAND.

COMMODE.

SPECIFICATION forming part of Letters Patent No. 246,881, dated September 13, 1881.

Application filed July 14, 1880. (No model.)

To all whom it may concern:

Be it known that I, Duncan C. Hartman, a citizen of the United States, residing at Baltimore, in the county of Baltimore and State of 5 Maryland, have invented certain new and useful Improvements in Commodes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in a commode in which the liquid and solid parts of the fecal matter are kept separate, thereby enabling the same to be disposed of with less labor and offensiveness, and the better adapt-20 ing it to be utilized for purposes of fertiliza-

tion.

The subject-matter constituting the invention will first be described and its mode of operation explained, and then designated in the 25 claims.

Figure 1 is a vertical section of the commode, illustrative of one mode of storing the liquid. Fig. 2 is a horizontal section through the same. Fig. 3 is a vertical section of the 30 parts, illustrating a separate receptacle within the commode for storing the liquid. Fig. 4 is a view of the urine-receptacle.

The letter A designates a metallic cylinder, which constitutes the outer case. A' is a tight 35 bottom, and B a wooden top or seat. having a metal flange, b, which fits within the upper rim of the cylinder; but other means than the metal flange may be employed to retain the seat in position. The seat is made in two 40 parts, and hinged so that the front portion, c, may turn up, as shown in broken lines in Fig. 1, for the purpose of giving access to the urinefunnel E, which is immediately below. A hinged cover, d, closes the usual hole, d', formed 45 in the top.

The letter F designates a movable receptacle to receive the more solid parts of the excrement. This receptacle fits within the case A. Its walls may be vertical or inclined. For 50 the most part they are circular, that portion,

however, nearest the front being preferably straight, as shown at F' in Fig. 2, by which space is left in the front part of cylindrical case A for means to carry off or store the urine. The receptacle F may have either a tight bot- 55 tom, as shown in Fig. 3, where a separate urinestoring receptacle, H, is combined within the commode, or it may have a strainer, g, in the bottom, as shown in Figs. 1 and 2, where a pipe, I, passes either through the side or bot- 60 tom to carry off the urine to a drain or to a tank, L, located in the cellar, or in a pit or other suitable place.

If desired, a filter-pad, m, of any suitable construction, may be placed over the strainer. 65

If a strainer is used, a flange, h, should be secured on the lower side of the bottom, around the strainer, and below the strainer-flange is placed a receiving pan or funnel, N, having a short pipe, n, which connects with the pipe I 70 leading to the urine-receiver. By this means the more solid parts of the excrement are drained of any liquid. The receptacle F rests upon suitable feet, f, which sustain it above the funnel N, and a bail or handles, r, are attached 75 for convenience in removing the receptacle.

My apparatus has been contrived with the object in view of utilizing the solid parts of the excreta by manufacturing it into commercial fertilizers. To this end it is necessary to 80 put the solid parts in the driest possible condition. I therefore not only have separate receptacles for the liquid and solid parts, but I provide the receptacle for the solid parts with means for draining off any liquid that may be 85 contained therein.

Just below the point of joinder of the funnel-pipe n with the pipe I is a filter-chamber, P, of any suitable form, in the present instance represented as a section of the pipe I. This 90 chamber is to contain charcoal or any other suitable filtering material for depriving the urine of feculent matter, and is important to be used as a sanitary precaution if the pipe I terminates in a house drain or sewer. The loca- 95 tion of the filter is such that the urine from the funnel and the drainings from the receptacle containing the solids are deprived of feculent matter. If the pipe I discharges the urine into a tank, L, the filter is not so important.

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It will be observed that the upper end, I', of the pipe I stands within the case A and reaches to a point above the top of the receptacle F. The upper end of this pipe is open and forms 5 a seat for the movable urine-funnel E, to which a pipe, e, is attached and depends within the stand-pipe I'. This arrangement places the urine-funnel in proper position with reference to the seat-hole d', and the pipe e permits the 10 funnel to be elevated when the hinged front part, c, of the seat is raised, as shown in broken lines in Fig. 1, for the convenience of a male person who does not desire to occupy the seat.

Should the premises in which the commode 15 may be located be so arranged as to prevent the use of a pipe, I, a separate receptacle, H, may be employed to receive the urine. This receptacle is of size and shape to sit within the space left in the front part of cylinder A, ad-20 joining the straight side F' of the other receptacle. The top of the urine-receptacle is somewhat in the form of a cone, g, which enables it to be easily emptied when turned upside down, and the pipe e of the movable urine-fun-25 nel enters the receptacle through a hole in the cone, the funnel E resting thereon, as shown in Fig. 4. A ventilating-outlet, s, leads to a flue, T, in the wall and affords escape for the odors.

In Fig. 1 a sack, M, is shown inside of the re-30 ceptacle F. This sack may be made of paper or other cheap material, and its top is secured at the upper edge of the receptacle by any suitable means. The sack serves to protect the receptacle from contamination, and when the 35 receptacle is emptied the sack, with its contents, is turned out.

To protect the hinged cover d from being soiled by contact of the gases or moisture it may have a covering of paper or other mateto rial detachably secured, as set forth in United States Letters Patent granted to me December 2, 1879.

I am aware that in water-closets a grating has heretofore been shown in the excreta-receptacle to allow the escape of water emptied 45 into said receptable for the purpose of flushing it and carrying off the solid parts, and I do not claim such a grating or strainer, nor any device for such purpose.

My improvements relate not to a water-closet, 50 but to a commode in which no water is employed. My strainer, therefore, occupies a horizontal position in the bottom of the receptacle and serves to confine all the solid parts.

Having described my invention, I claim and 55 desire to secure by United States Letters Patent—

1. In a commode, the combination of an outer case, a movable urine-funnel within the outer case having a depending pipe attached, and 60 means with which the depending pipe connects also within the outer case to receive the urine, whereby the funnel may be elevated, as and for the purpose set forth.

2. In a commode, the combination of a urine- 65 funnel having a depending pipe attached to permit the elevation of the funnel, and a seat having a hinged portion immediately above the funnel, as set forth.

3. In a commode, the combination of a re- 70 ceptacle for the more solid parts of the excreta, a strainer having a horizontal position in the bottom of the receptacle, and a pan or funnel to receive the drainings which pass the strainer or outlet, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

DUNCAN C. HARTMAN.

Witnesses:

CHAS. B. MANN, W. A. NUMSEN.