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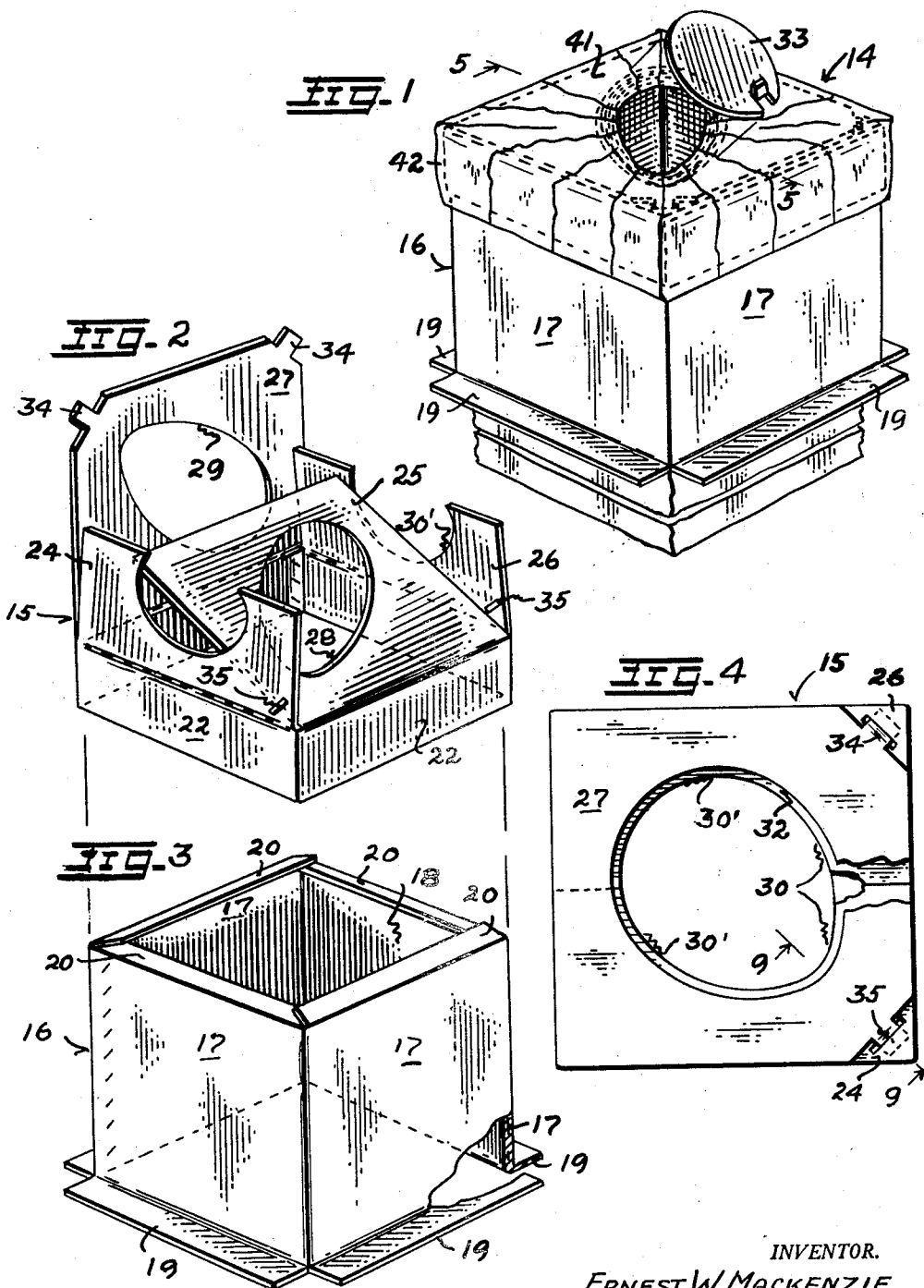
E. W. MACKENZIE

2,912,702

COMMODE

Filed June 25, 1956

2 Sheets-Sheet 1



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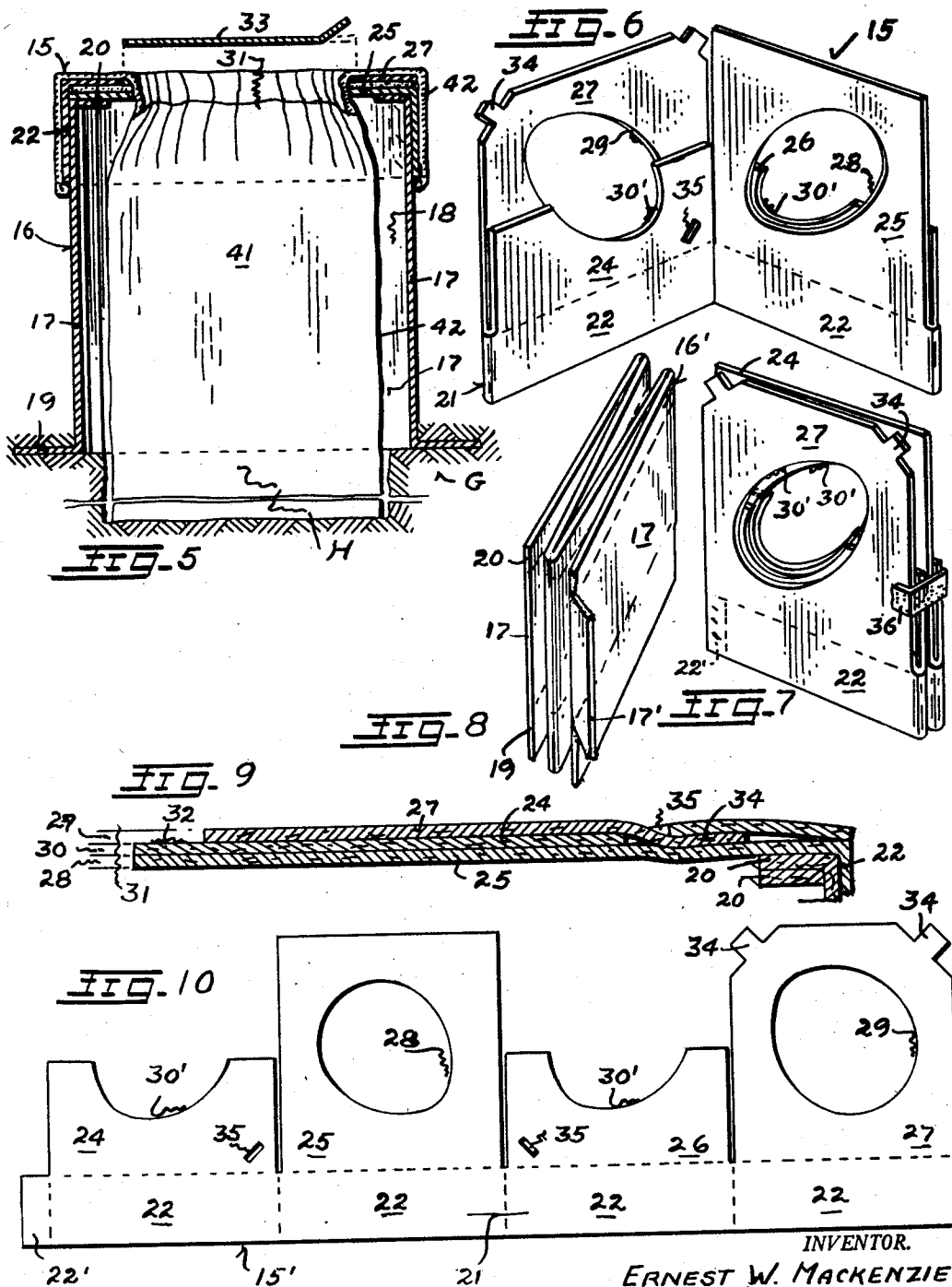
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1

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COMMODORE

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1 Claim. (Cl. 4—135)

The invention relates to a commode for use in locations at which water-closets are lacking or are not readily accessible to a user.

Campers and vehicle riders and sick persons and others frequently find a need for commode facilities at locations not provided with permanent such accommodations, and the present general object is to meet the need by means of a portable commode structure which is particularly designed for use at such locations.

Another object is to provide a foldable commode of the character described which may be transported as a unit in a compactly folded condition to and from places of its use.

An added object is to provide a commode having a particularly inexpensive structure which may thereby be disposable.

Yet another object is to provide the commode with a separate self-mounting and replaceable liquid-tight disposable excreta bag which may receive and retain charges of a deodorant, as desired or required.

A still further object is to provide for the use of a top portion of the mounted excreta bag as a sanitary covering for the commode seat.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth or be apparent in the following description of a typical embodiment thereof, and in the accompanying drawings, in which,

Figure 1 is a perspective view of a present commode unit as set up for its use.

Figure 2 is a perspective view of a partly unfolded seat element of the commode.

Figure 3 is a perspective view of an unfolded base element of the commode.

Figure 4 is a top plan view of the folded seat element.

Figure 5 is an upright section through the completely set-up commode.

Figure 6 is a perspective view showing the partly unfolded seat section of the commode.

Figure 7 is a perspective view of the fully folded and packaged seat element of the commode.

Figure 8 is a perspective view of a longitudinally folded blank which provides the base element of the commode.

Figure 9 is an enlarged fragmentary section taken at the line 9—9 in Figure 4.

Figure 10 is a side face view of the flattened-out blank which provides the seat element.

As particularly illustrated, the features of my invention are embodied in the structure of a unitary commode assembly 14 which primarily comprises a unitary seat section 15 and a unitary base section 16, with the latter section arranged for its erection on a flat supporting surface provided by the ground or a floor. When installed on the ground G, as is indicated in Figure 5, the base section 16 of the present commode structure may span a depression or hole H provided in the ground. The present base section 16 essentially comprises an alignment of

2

side panels 17 of like rectangular outline hingedly connected at their sides, and a blank 16' (Figure 8) for the base section 16 is provided with an end extension 17' for stapled or other fastening to and flat against the other end of the blank to provide a closed periphery for the base which may be folded flat or be unfolded to support the seat section 15 while defining a rectangular space 18 (Figure 3) within it.

The bottoms of the present base panels 17 are provided with hingedly and integrally attached and mutually unattached rectangular extensions 19 therealong, with the various said extensions arranged for their disposal in coplanar relation to extend outwardly or inwardly of the panels as flanges for transversely stiffening the panels thereat. Also, suitable weighty articles or materials may be placed on top of the extensions 19 to hold the opened-out base against shifting on the supporting surface; as indicated in Figure 5, dirt may be placed on the outstanding extensions 19 for the purpose. At the top thereof, the base panels 17 are preferably provided with relatively narrow rectangular and laterally unattached extensions 20 which are arranged for swinging inwardly into coplanar relation as panel-stiffening flanges thereat when the base is set up for use, said extensions being further utilized in a manner to be hereinafter brought out.

By reference to the structure of a seat section 15, Figure 10 shows that the same is arranged to be formed from a blank 15' which provides a continuous portion 21 of uniform width made up of a connected strip of relatively narrow rectangular panel sections 22 and having its ends connected by a flap 22' extending from one end of the strip and fixed to and flat against its other end, as by stapling. Rectangular members 24 and 25 and 26 and 27 extend from corresponding side edges of the strip sections 22 as flaps in hinged relation thereto for their generally coplanar disposal to cooperatively provide a seat board of laminated structure for the seat section 15. The members 25 and 27 are of generally square outline, and are very slightly larger than the rectangle defined by the top edges of the base panels 17 when the base is unfolded into a rectangular form for its use. The members 24 and 26, it will be noted, are half as long as the members 25 and 27 as measured from their hinged edges to provide for their mutually coplanar disposal between the opposed members 25 and 27.

The members 25 and 27 are respectively provided interiorly thereof with oval openings 28 and 29 of similar outline, with the major axes of their ovals diagonally related to the members providing them and with the opening 28 slightly smaller than the opening 29, and said openings are arranged for their mutually aligned registration when the members 25 and 27 are folded into mutually opposed relation, as in Figure 5. The members 24 and 26 are provided with half-oval openings 30' which are arranged to jointly define an opening 30 having the same size and outline as the opening 29 of the member 27 for registration with the latter opening when the members are coplanar. It is to be noted that the folded disposal of the seat members 24 and 26 upon the member 25 and the folding of the member 27 upon the folded-down members 24 and 26 combines the aligned openings 28 and 29 and 30 to provide a seat opening 31 of appropriate size and shape for best accommodating intended users of the commode. Also, the diagonal relation of the seat opening 31 to the seat-providing members permits a user of the commode to most comfortably occupy the seat with different feet disposed opposite the different base side panels 17 which intersect beneath the major axis of the opening, it being noted that the smaller end of the oval of the opening is nearest the intersection line of said panels.

By particular reference to Figures 2 and 5, it will be noted that the seat section 15 is prepared for its use by first folding the member 25 thereof inwardly into parallel relation with the plane of the top edges of the connected panel members 22 of the section, folding the mutually complementary members 24 and 26 inwardly above it into coplanar relation, and then folding the member 27 upon the coplanar members 24 and 26 to complete a laminated seat-board structure upon the upright rim provided by the strip 21 which is arranged to snugly and telescopically receive the top of the base section 16 to engage the seat board with the inwardly-turned base extensions 20 which then function to assure a peripherally-centered support of the formed seat unit upon the base 16. The oval openings 28 and 29 are of similar outline, and the folded disposal of the end member 25 upon the member 27 provides a rimming shelf 32 about and above the opening 30 of the members 24 and 26 for the mounting thereon of an oval lid 33 having an outline complementary to that of the larger opening 29; the lid 31 may conveniently comprise the piece of material removed in providing the latter opening.

It will now be noted that the seat and base sections 15 and 16 are most simply provided and shaped from non-metallic blanks of cardboard, or the like, such that the seat and base assembly will support the body of a heavy adult without collapse. The mutual hinging of the various extensions 19 and 20 of the base panels 17 and the hinging of the seat members to the rim or apron strip 21 of the seat are most simply provided by scoring one-piece cardboard sheet blanks at the connection boundaries of their parts; as particularly shown in Figure 10, the seat section 15 is arranged to be provided from a one-piece blank 15'. Particularly in view of the transverse stiffening of the cooperative seat board members 24 and 25 and 26 and 27 by the apron rim provided by the strip 21 of the seat section 15, and the transverse stiffening of the base side panels 17 by the extending lower and upper flanges 19 and 20 of the base section 16, the cardboard of the present commode structure may be relatively thin and light for providing a particularly inexpensive disposable commode; a satisfactory cardboard for providing both the base and seat sections is identified as comprising a corrugated cardboard having its corrugations upright in the rim portion 21 of the seat section 15 and in the panels 17 of the base section 16.

Means are preferably provided for securing the top seat board member 27 in superimposed and supported position upon the assembly of the members 24 and 25 and 26, said means comprising integral tongues 34 provided at the free corners of the top seat member 27 by notching away material at said corners whereby the tongues 34 may have parallel side edges and extend diagonally of the board. At the inner corner points of the members 24 and 26 with which the tongues 34 register when the extension 27 is lowered upon the other seat top members, the members 24 and 26 are respectively provided with slots 35 which are arranged to complementarily receive the tongues 34 for securing the seat board assembly in releasably compacted condition for the direct seated disposal of a person thereon. By reference to Figure 7, it will be noted that a flat-folded seat-providing section 15 may be held in a compacted condition by the connecting application of adhesive straps 36 over opposed edge portions of the seat members 24 and 27. Figure 8 discloses a blank 16' for the base section 16 as in folded condition with its panels 17 and the associated extensions 19 and 20 thereof mutually coplanar and in transversely opposed relation, the securing extension 17' at one end of the blank 16' not having been secured to the other blank end for completing the base section 16.

Although the commode structure so far described is usable for its purpose while disposed over a separate receptacle or a ground hole arranged to directly receive

body excretions comprising urine and feces, the set-up unit may desirably and conveniently be provided with a disposable receiver in unitary association with it, and such a receiver preferably comprises a bag 41 of liquid-tight material of a suitable flexible composition as polyethylene. Such an excreta-receiving bag is directly supported from the seat board assembly and may, when mounted on a present set-up commode, depend to a level either above or below the bottom level of the open base as defined by the bottom edges of the base side panels 17; Figure 5 illustrates the depending extension of a bag 41 into a hole H. For sanitary reasons, a present excreta bag 41 is arranged to provide a complete coverage for the seat top about the container opening 31 provided by the seat section 15, and in such a manner that the mounted bag externally encloses the section while being held suspended therefrom through said opening.

As is brought out in Figures 1 and 5, an excreta bag 41 has a tubular side wall 42 which is circumferentially large enough to closely receive the periphery of the set-up seat section 15 with more or less of the upper bag side portion preferably extending opposite and below the peripheral seat strip or apron 21 for securing the bag top to the section, it being understood that the bag portion overlying the seat-board assembly is additionally held by and during the seating of an occupant of the commode upon it. While a bag 41 is supported by the present commode between periods of use thereof, the lid 30 may be applied within the bag portion at the commode opening for generally closing the bag against the escape of odors therefrom and may also retain any fumes of a charge of a deodorant placed therein. Also, the excreta bag 41 would be relatively inexpensive, and therefore disposable, as required for the continued use of the support assembly in a given location or its successive use in different locations, it being understood that a present commode assembly may be advantageously used either outdoors or indoors where commode facilities are lacking.

While the base and seat units of the present commode have been shown as being of complementary rectangular outline in plan when they are expanded for the mounting of the seat unit on the base unit, it will be understood that said units may have other mutually similar polygonal outlines in plan, as triangular in particular. Also, a present commode arranged to have its peripherally continuous base and seat portions rectangular in plan when unfolded is conveniently provided as a complete commercial product with its base unit 16 folded flat on a diagonal of its rectangle and receiving within it the seat unit 15 and the flexible excreta bag 41 in flat folded condition in a particularly compact package for its transportation or storage. Furthermore, if desired, more than one excreta bag may be provided with a packaged present commode, and individual packages (not shown) of deodorant material may be provided within the packaged commode for opening for the placement of its charge within the bag when the latter is mounted in the described manner on the unfolded and set-up commode.

From the foregoing description taken in connection with the accompanying drawings, the advantage of the present commode will be readily understood by those skilled in the art to which the invention appertains. While I have shown and described a structure and arrangement which I now consider to be a preferred embodiment of my invention, I desire to have it understood that the showings are primarily illustrative, and that such changes and developments may be made, when desired, as fall within the scope of the following claim:

In a portable commode, a foldable tubular base unit of uniform polygonal outline in plan having upright rectangular side panels extending to a common top plane, a foldable seat unit having a continuous peripherally sectioned rim complementarily receiving said base unit and providing an interiorly apertured seat board of laminated

5

structure having the laminations thereof comprising hingedly attached extensions of the rim sections and disposed in mutually parallel opposed relation to provide the seat board, an excreta-receiving bag depending through the seat board aperture and having the portion thereof about the aperture folded outwardly about the seat unit in closely fitting relation thereto for securing the upper bag portion to the seat unit with the bag bottom in adjusted spaced relation to the seat board, said bag being of a liquid-tight material and being arranged to receive and retain a charge of a deodorant material, and a closure member for sealedly engaging with the bag in said aperture of the seat unit.

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6

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