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T. C. NAGEL

3,588,921

TOILET MOUNTED DISPOSABLE STOOL SPECIMEN COLLECTOR

Filed Oct. 9, 1969

Fig. 1

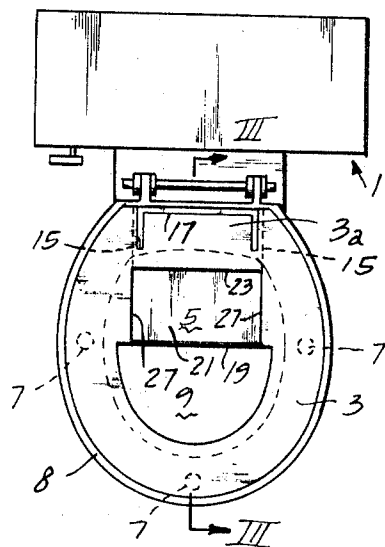


Fig. 2

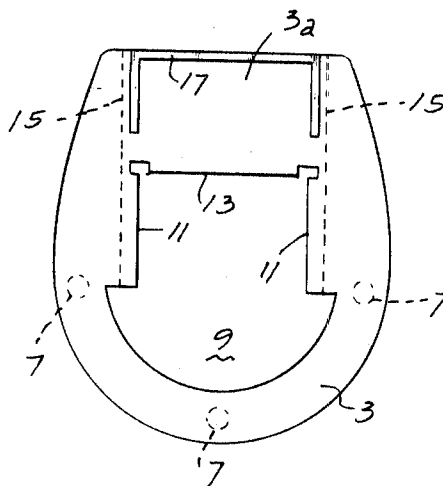


Fig. 3

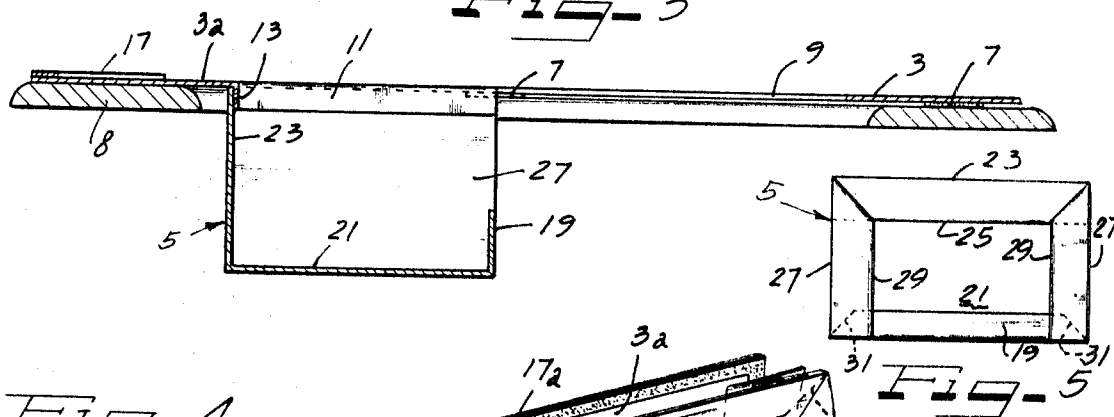


Fig. 4

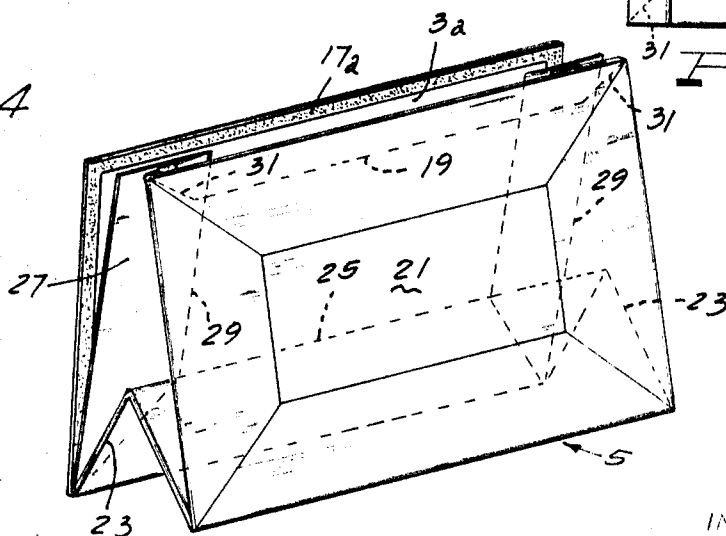
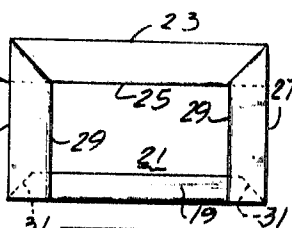


Fig. 5



INVENTOR

THEODORE C. NAGEL

BY

Hill, Sherman, Morris, Good & Simpson

ATTORNEYS

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TOILET MOUNTED DISPOSABLE STOOL SPECIMEN COLLECTOR

Theodore C. Nagel, 315 N. Maple Ave.,
Oak Park, Ill. 60302

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9 Claims

ABSTRACT OF THE DISCLOSURE

A combination toilet seat cover and stool specimen collector made of paper, plastic, or other collapsible or foldable material. The specimen collector is attached to the seat cover at the rear end so as to leave a front opening for urine to pass directly into the toilet. The specimen collected depends into the toilet from the seat cover a distance shorter than normal water level in the toilet. The under-side of the seat cover is provided with means for pressure adhering the cover to the toilet seat. Perforated lines are provided in the seat cover so that the specimen holder containing the specimen can be easily separated from the toilet seat cover.

BACKGROUND OF THE INVENTION

In the course of medical examination of patients it is frequently necessary to obtain specimens of the human feces uncontaminated with other material such as urine. The present invention is intended to simplify this procedure.

While the prior art such as U.S. Patent 2,840,826 includes devices for obtaining specimens of feces, the prior art devices did not provide a combination seat cover and collector and the placement of these devices on the toilet seat was not controlled to insure that the sample would be collected.

SUMMARY OF THE INVENTION

This invention is directed to a combination sanitary toilet seat covering and feces collector so that the sample of stool for medical examination can be obtained conveniently while the patient sits on a toilet.

The subject of the invention comprises a sanitary toilet seat cover having depending from the lower portion thereof a receptacle for receiving stool. There is an opening in a forward portion of the cover so that urine will pass directly into the toilet without contaminating the sample of feces.

The subject matter of the invention can be made from manila or kraft paper or can be made from plastic film or sheet. Any other material which is capable of being collapsed or folded into a flat package may be used. The article of manufacture comprising the invention can be made in a single operation from plastic material by known processes of molding, or, can be made from paper by forming the seat cover separately from the stool receptacle and then adhesively fastening the two together. In either case, the finished article can be folded into a flat package for shipment and sale. Pressure-sensitive adhesive is applied to a plurality of spots on the under-side of the seat cover so that it can be made to adhere to the toilet seat temporarily. The cover is also formed with the perforated lines so that the stool receiver can be easily torn loose from the remainder of the seat cover after it is used.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a plan view of a drawing showing the combination seat cover and stool specimen collector mounted on the seat.

FIG. 2 is a plan view of the sanitary cover portion of the combined cover and specimen collector.

FIG. 3 is a cross-sectional view taken along the lines of III-III of FIG. 1.

FIG. 4 is a perspective view looking at the bottom and side of the stool specimen collector in a partially folded position.

FIG. 5 is a plan view of the stool specimen collector looking at the top thereof when in completely folded position.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawing the numeral 1 represents a toilet with the combined sanitary seat cover and stool specimen collector mounted thereon. The sanitary cover is represented by the numeral 3 and the stool specimen receptacle is represented by the numeral 5. The cover and specimen collector may be made of any suitable material such as kraft or manila paper or plastic sheet material. The material should have enough strength to hold the specimen and should be collapsible or foldable so that it can be formed into a flat package for shipment and sale.

When in use the package is unfolded and straightened out so that the seat cover fastens generally in shape to the toilet seat. The linear surface of the seat cover 3 has pressure-sensitive adhesive applied thereto at a plurality of spots 7. While only three spots are shown in the drawing more than three spots may be used. The pressure-sensitive material may be covered by a non-adhering material which is stripped off prior to use. When applied to a toilet seat 8 and the pressure-sensitive adhesive 7 will adhere the cover to the seat.

The stool specimen receptacle 5 depends on the rear of the cover leaving an opening 9 at the forward portion of the cover in order to permit urine to pass clearly into the toilet without contaminating the specimen in the stool collector.

If the combination specimen collector and seat cover is formed of plastic sheet material it may be molded in a single operation. If it is made from paper, it may be made by forming the seat cover separately and then adhesively fastening the specimen collector to the seat cover. If made in this latter manner it is not necessary that the seat cover and the specimen be made out of the same type of paper. For example, the seat cover can be made out of white paper which is commonly used for toilet seat covers and the stool specimen receptacle can be made out of manila or kraft paper.

When the cover and the receptacle are separately formed, then adhered together, the cover is cut in the form shown in FIG. 2 which has the side tabs 11 and the rear tab 13. The cover is perforated along the lines 15. A reinforcing strip 17 in the shape of a U may be adhesively fastened to the top surface of the seat cover. The sides of the strip 17 are adjacent to the perforated lines 15 so that when the back portion of the seat cover, to which the specimen receptacle is fastened, is torn loose from the remainder of the seat cover, it facilitates tearing along the perforated line.

This stool specimen receptacle can be formed out of an ordinary rectangular shaped bag either by cutting the walls down to the proper height or by forming a bag in the first instance with walls of a proper height. The depth of the bag should ordinarily be approximately 3 to 4 inches in order to provide sufficient space for the stool and to prevent the bottom of the bag from becoming immersed in the water in the toilet bowl. The rear wall and the side walls of the specimen receptacle are the same height but ordinarily I prefer to have the front wall

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19 extend upwardly only a short distance sufficient to retain the stool in the receptacle. The height of the front wall may be between $\frac{1}{2}$ and 1 inch.

FIG. 4 shows the stool receptacle in a partially folded position to show the manner in which it is folded prior to use. The numeral 21 illustrates the bottom of the holder or receptacle. The rear wall 23 is folded along the lines 25 approximately $\frac{1}{2}$ way between the top and bottom of the wall. The side wall 27 is creased inwardly along the lines 29, the short front wall 19 is creased along the lines 31, and the wall 19 is bent inwardly against the upper face of the bottom of the receptacle.

FIG. 5 shows the specimen receptacle in fully folded position looking at the opposite face from that of FIG. 4. The cover of FIG. 2 is then assembled with the receptacle of FIG. 5 while in its folded position by applying adhesive to the under-side of the tabs 11 and 13 and applying them to the top edge portions of the walls 23 and 27. Any suitable adhesive material may be used for this purpose. If the device is made of plastic in two separate pieces, the cover and the receptacle portion can be adhered by pressure heating and sealing. When the combined seat cover and specimen receptacle are assembled, this specimen receptacle will occupy the space bounded by the walls 11 and 13. After it is assembled, the cover portion can be folded about the receptacle portion to make a relatively small package.

After a specimen has been deposited in the receptacle 5, the receptacle containing the specimen can be torn loose from the remainder of the seat cover by grasping the back edge portion of the strip 17 in the fingers and pulling it forward so that it tears loose from the remainder of the seat cover along the perforated lines 15. The perforated lines 15 are preferably outside the portion of the tabs 11 which is adhered to the specimen receptacle in order to facilitate tearing the receptacle loose from the remainder of the cover. The portion 3a of the seat cover 3 then provides a flap or cover for the bag providing a purse-like container for the stool. The strip 17 may be peeled from the portion 3a exposing pressure sensitive adhesive 17a to seal the cover to the side walls and bottom of the bag. After the receptacle and the specimen are removed, the remainder of the cover can be lifted from the toilet seat and disposed of.

It will be seen, therefore, that I have provided a combination sanitary toilet seat and stool specimen collector which can be readily placed on a toilet seat in a position such as to enable the stool to be collected free of urine. By positioning the cover on the toilet seat so that the opening 9 approximately conforms to the front portion of an opening in the toilet seat, the receiver will be in the proper position when a person sits on the toilet in the normal manner.

I claim as my invention:

1. A disposable stool collector for suspension in a water closet toilet to receive stool from an occupant of the toilet while allowing free passage of urine into the toilet which comprises a foldable, disposable sheet material receptacle having a bottom, sidewalls and a rear wall, toilet disposable holding means connected to the receptacle and attachable to the toilet for suspending the

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receptacle in the toilet bowl above the normal water level therein, said receptacle when opened being of such size and being so positioned on the holding means that it will extend below only the rear portion of the toilet opening, and said receptacle being foldable into a compact bag.

2. A stool collector in accordance with claim 1 in which said holding member is a flat seat cover made of collapsible material, conforming generally in size and shape to a toilet seat, said collector being of such size and being fastened to said member so that it extends below the rear portion only of the toilet seat opening when said holding member is placed in proper position on the toilet seat.

3. A stool collector in accordance with claim 2 in which said flat seat cover is provided with pressure-sensitive adhesive on the under surface thereof.

4. A stool collector in accordance with claim 2 made of paper and folded into a substantially flat compact package prior to use.

5. A combination seat cover and stool collector in accordance with claim 4, in which said stool collector is formed like a collapsible rectangular paper bag.

6. A stool collector in accordance with claim 2 in which said flat member is provided with weakened lines running along the sides of said receiving portion to the rear edge of said member, whereby said receiving portion and the portion of said member between said lines can be readily separated from the remainder of said flat member.

7. A combination seat cover and stool collector in accordance with claim 2 in which the front of said receiving portion is open when mounted for use on a toilet.

8. A combination seat cover and stool collector in accordance with claim 2 in which the opening in the front portion of said flat member is sufficiently large to allow urine to pass therethrough and the receiving portion is of sufficient size to collect feces during evacuation.

9. A combination seat cover and stool collector in accordance with claim 8 in which said receiving portion is made of paper and is rectangular in shape when opened.

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LAVERNE D. GEIGER, Primary Examiner

H. K. ARTIS, Assistant Examiner

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