July 22, 1952 H. E. SMITH 2,604,096

HOSPITAL COLOSTOMY GUARD

Filed Feb. 14, 1951 4 Sheets-Sheet 1

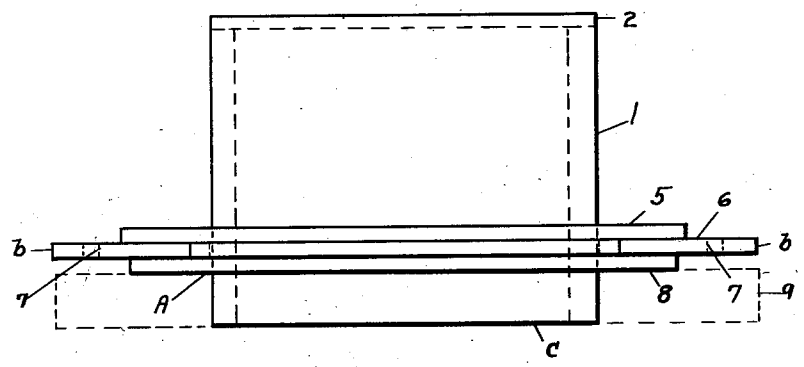


Fig. 2

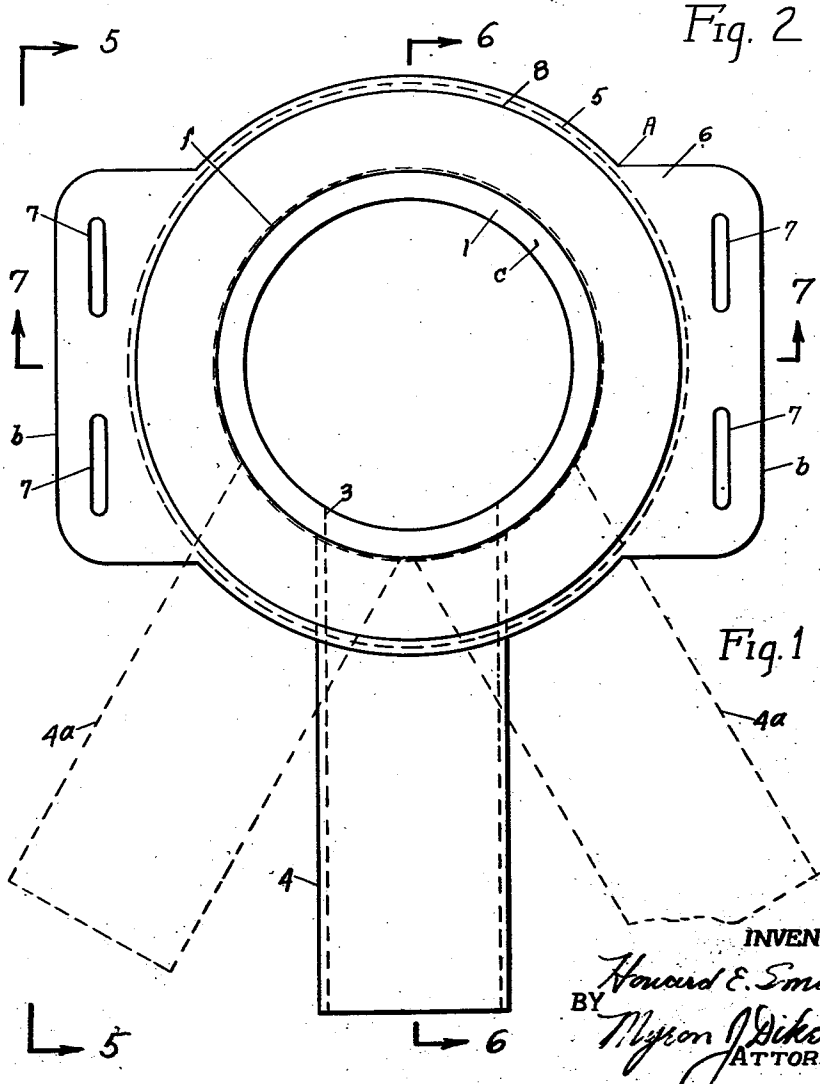


Fig. 1

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HOSPITAL COLOSTOMY GUARD

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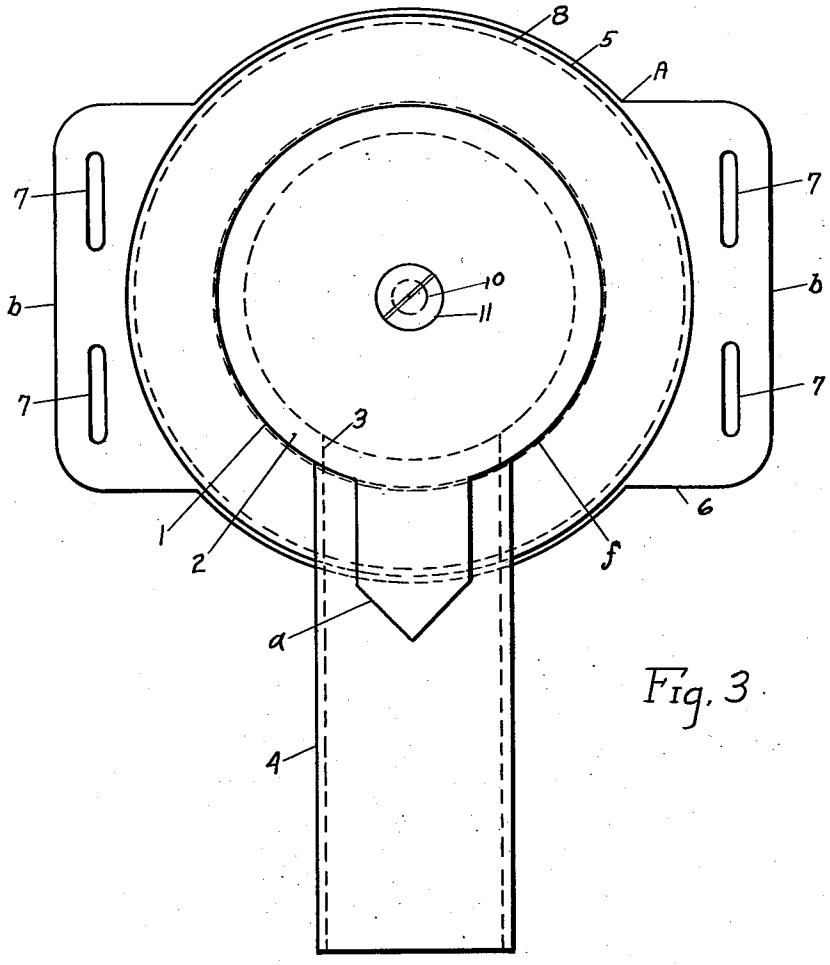


Fig. 3

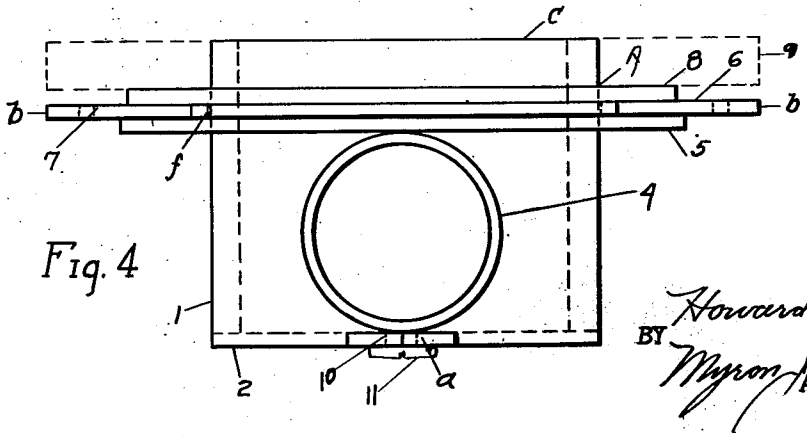


Fig. 4

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HOSPITAL COLOSTOMY GUARD

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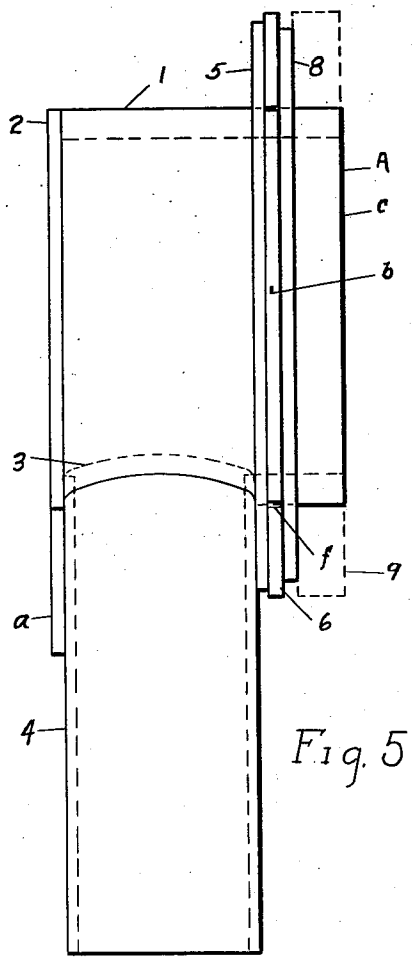


Fig. 5

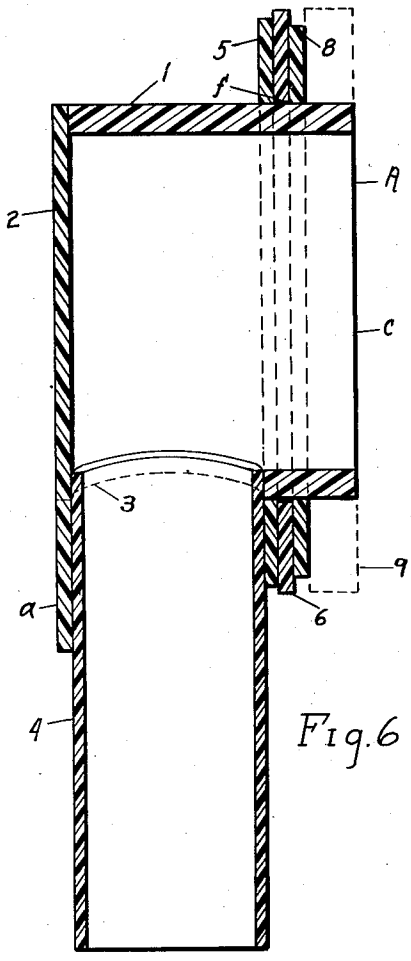


Fig. 6

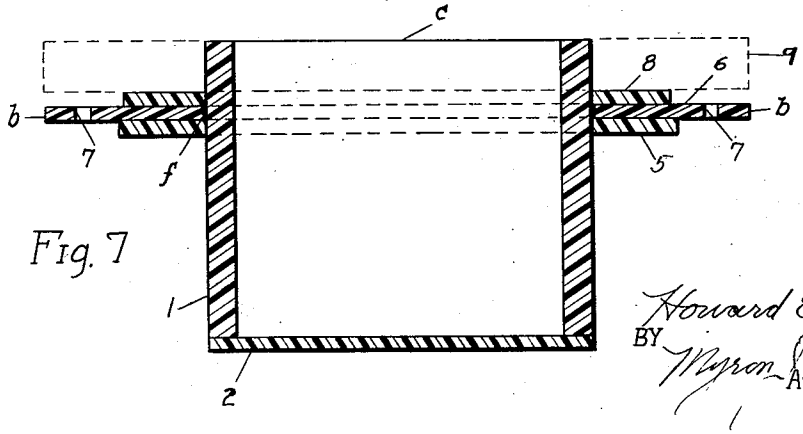


Fig. 7

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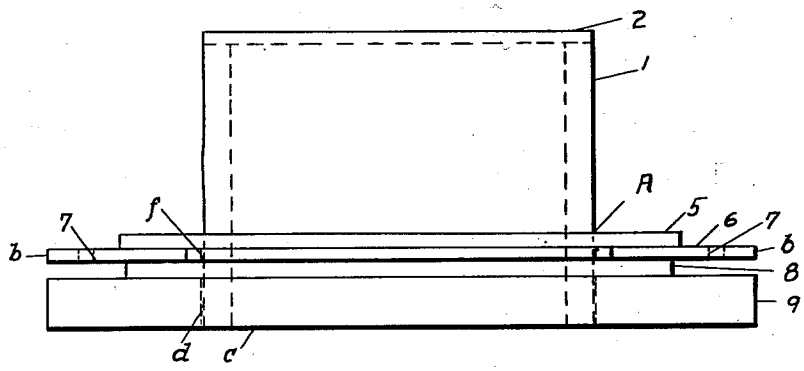


Fig. 9

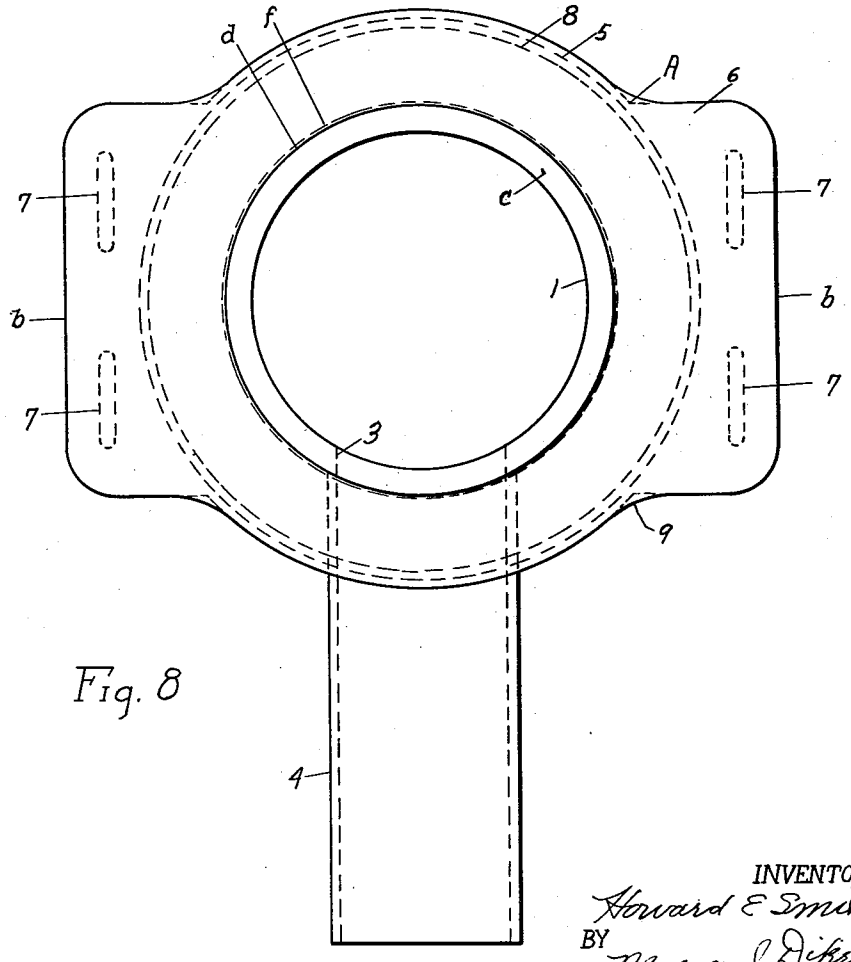


Fig. 8

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UNITED STATES PATENT OFFICE

2,604,096

HOSPITAL COLOSTOMY GUARD

Howard E. Smith, Monroe, Mich.

Application February 14, 1951, Serial No. 210,931

3 Claims. (Cl. 128—283)

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My invention relates to a special medical appliance adapted for care of hospital patients after a colostomy operation, and is especially designed for bed patient use.

The object of my invention is to provide a special hospital colostomy guard for bed patients, adapted for uncontrollable discharge with means for conveying same to an adjacent bed container.

Another object is to provide a hospital colostomy guard that is adjustable to various positions on the guard support frame, as the patient is moved to different positions, and without disconnecting from the receiving container.

A further object is to provide a hospital colostomy guard that will fit comfortably over the body surface and adjust thereto while forming a sealed, liquid tight contact therewith without undue body pressure.

A still further object is to produce an adjustable colostomy guard unit that is transparent for constant inspection or examination, without removal of the unit, and designed for continuous use and for replacing the absorbent pads previously used for colostomy patients.

These several objects are attained in the preferred form by the construction and arrangement of parts as are more fully hereinafter set forth.

Similar parts on all drawings are marked by similar numerals or letters.

Fig. 1 is a front elevation of the adjustable colostomy guard (with the sponge rubber body pad removed), showing the guard discharge chamber open end inlet, and the general arrangement of the operating parts, also indicating various adjustable positions of the discharge outlet tube.

Fig. 2 is a top view of the assembled guard unit, showing the relative position of the assembled parts and sections.

Fig. 3 is a back elevation of the same guard unit shown in the Fig. 1, showing the discharge chamber closed outer wall, and means for attaching the discharge tube to the chamber.

Fig. 4 is a bottom view of the same assembly in Fig. 1, showing the relative position of the discharge tube section.

Fig. 5 is a side view of the assembled guard as taken on the line 5—5 of the Fig 1, showing the complete unit assembly.

Fig. 6 is a longitudinal sectional view as taken on the line 6—6 of the Fig. 1, showing the construction of the unit assembly, and means of operation.

Fig. 7 is a cross-sectional view as taken on the line 7—7 of the Fig. 1, showing the rotatable member mounted therein.

Fig. 8 is a modified front elevation similar to the Fig. 1, but assembled with the sponge rubber

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body pad mounted thereon, ready for application and use.

Fig. 9 is also a modified top view similar to the Fig. 2, showing the relative position of the rubber body pad illustrated in the previous Fig. 8.

In general surgery, a colostomy operation is performed at a predetermined position on the human abdomen, and usually for correction or removal of intestine sections, and resulting in the severed intestine open end projected out through the abdomen incision, and remaining in that position, either permanently, or temporarily, as the case may require. My hospital colostomy guard is especially adapted for bed patients, for inclosing and guarding the open intestine end, receiving the discharge therefrom for conveying same to an adjacent container, and may be readily readjusted to any position of the patient without removal.

In general, my colostomy guard comprises an open end cylindrical discharge chamber section, designed with a discharge outlet tube fixedly mounted on one side thereof and opening therein. The cylindrical discharge chamber is provided with a pair of spaced guide collars fixedly mounted over the outer cylindrical wall, at a predetermined position from the open chamber end, and which carries an adjustable belt strap plate rotatably mounted between the spaced collar guides, adjustable to various positions therein. Suitable body belt straps are attached to the belt strap plate end recesses for retaining said guard securely over abdominal incision, after the operation is completed.

I will now describe more fully the detailed construction of my device, referring to the drawings and the marks thereon.

The discharge chamber A is preferably made of transparent plastic material, or of any other suitable material, and is designed with a short cylindrical body section 1 of predetermined diameter, and is closed at the outer end by a flat end wall plate 2 of like plastic material, fitted and sealed thereover, preferably by a fusion process, or may be moulded as an integral part thereof. Both the inner and outer surfaces being made smooth and polished. Through the cylindrical side wall 1, adjacent the outer end plate 2, is formed a circular discharge port opening 3, of suitable size, and carries a discharge tube 4, also of plastic material, fixedly mounted therein, projected outwardly therefrom and at right angles thereto. The discharge tube 4 of any desired size or length, is preferably fused, or moulded, together with the cylindrical discharge chamber wall and as an integral part thereof. The chamber end wall plate 2 is preferably designed with an extended brace arm *a* extended along the discharge tube wall, and likewise fused thereto for more rigidly retaining the tube in position.

Over the outer cylindrical wall of the discharge chamber section 1, near the inner open end, is mounted a fixed collar guide ring 5 positioned at right angles thereto adjacent the discharge tube 4, and is preferably sealed or fused to both chamber and tube sections for rigidly joining the sections together. Rotatably mounted over the cylindrical section 1, adjacent the guide collar 5, is an adjustable circular belt strap plate 6, having a central bearing *f* and preferably formed with semi-rectangular ends *b* along opposite edges thereof. Each end section *b* is designed with suitable elongated belt recesses 7 therethrough, for receiving an adjustable strap belt therein. Also mounted over the cylindrical body section 1, adjacent the rotatably mounted belt plate 6, is a secondary guide collar 8, likewise securely and fixedly attached to the chamber wall 1, by fusing, or otherwise. The two guide collars 5 and 8 form a closed bearing frame for the inclosed rotatably mounted belt plate 6, allowing same to be rotated to any position therein. The inner open end *c* of the cylindrical discharge chamber 1, is projected a predetermined length inside the fixed guide collar 8, suitable for mounting a rubber pad 9 thereover, and preferably equal to the pad thickness. The body pad 9 is preferably made of sponge rubber, and of a design similar in size and shape to that of the belt strap plate 6, and with a central circular opening *d* for fitting over the chamber 1 end. The body pad 9 is preferably formed with a sealed inner rubber surface for making a liquid tight contact when applied, to prevent leakage, and for body comfort to the patient.

My hospital colostomy guard is applied to the patient by placing the open cylindrical casing end over the colostomy incision, projecting the severed intestine open end within the chamber recess, the guard ring and attached sponge rubber pad forming a sealed body contact, and a suitable adjustable belt as may be mounted in the belt plate slot recesses, will retain the guard securely in place until removed. The discharge tube 4 and attached chamber 1 may be rotated to any desired position as indicated by dotted lines 42 of Fig. 1, and as required by the patient, for attaching a flexible drain tube thereto, and which may lead to an adjacent receiving container positioned at one side of the patient, or the bed. The tube 4 may be easily readjusted whenever the patient is moved to a new position, but always with the same sealed contact with the patient's body, and ready for use.

For special hospital cases, where internal irregation is required of the patient, a hole 10 may be centrally formed through the chamber head plate 2, as indicated in the Figs. 3 and 4 of the drawings, and of a size to fit the rubber tube to be inserted for an enema, and a suitable closing plug 11 may be fitted therein when not so used. The size and length of both the casing A and the tube 4 may be varied as desired, depending upon the patient's requirements. Also the casing open end *c* may be reduced to a small opening where internal pressure of a patient may require full surface support.

Having fully described my hospital colostomy guard, what I claim as my invention and desire to secure by Letters Patent is:

1. A hospital colostomy guard adapted for bed patient use and used with a suitable body belt unit, comprising a cylindrical discharge chamber of predetermined size and length and formed with one closed end and with the opposite end open, a closable irrigation port formed through the chamber closed end, a tubular discharge unit formed on one side of said cylindrical discharge chamber and opening therein, a pair of spaced circular guide collars fixedly mounted over the cylindrical discharge chamber outer wall at a predetermined location thereon, a flat belt strap plate with a central bearing, rotatably mounted between said spaced guide collars, and means for attaching a body belt unit to opposite ends of the said belt plate.

2. A hospital colostomy guard adapted for bed patient use and used with a suitable body belt unit, comprising a cylindrical discharge chamber of predetermined dimensions and formed with one open end and one closed end, formed with a closable central wall port, a tubular discharge outlet unit fixedly mounted on one side wall of said cylindrical discharge chamber, opening therein and positioned adjacent said chamber closed end wall, a circular washer guide collar fixedly mounted over the cylindrical discharge chamber positioned adjacent the projected tubular discharge tube, an elongated belt strap plate formed with a central bearing opening, rotatably mounted over said discharge chamber wall adjacent said circular washer guide collar, a secondary washer guide collar also fixedly mounted over said cylindrical discharge chamber wall adjacent said rotatably mounted belt strap plate, and a flexible body pad mounted over the discharge chamber open end adjacent said secondary washer guide collar.

3. A hospital colostomy guard adapted for bed patient use and used with a suitable body belt strap, comprising a cylindrical discharge chamber of predetermined diameter and length and formed with one open end and with the opposite end closed, a tubular discharge outlet unit designed for attaching a discharge hose thereto, formed on the discharge chamber cylindrical side wall and opening therein, said discharge tube being positioned adjacent the chamber closed end, a circular washer guide collar fixedly mounted over said discharge chamber positioned adjacent said tubular discharge tube, said guide collar being rigidly fused thereto, an elongated belt strap plate formed with central bearing open and belt strap recesses, rotatably mounted over said discharge chamber adjacent said washer guide collar, a secondary washer guide collar also fixedly mounted over the cylindrical discharge chamber wall positioned adjacent the rotatably mounted belt strap plate and at a predetermined distance from the discharge chamber open end, a flexible sponge rubber body pad mounted over the discharge chamber open end adjacent said secondary washer guide collar and flush with the chamber open end wall edge.

HOWARD E. SMITH.

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