Dec. 12, 1967 A. ROSENBERG 3,357,430

INDIVIDUAL URINARY APPLIANCE

Filed May 16, 1966 3 Sheets-Sheet 1

Fig - 1.

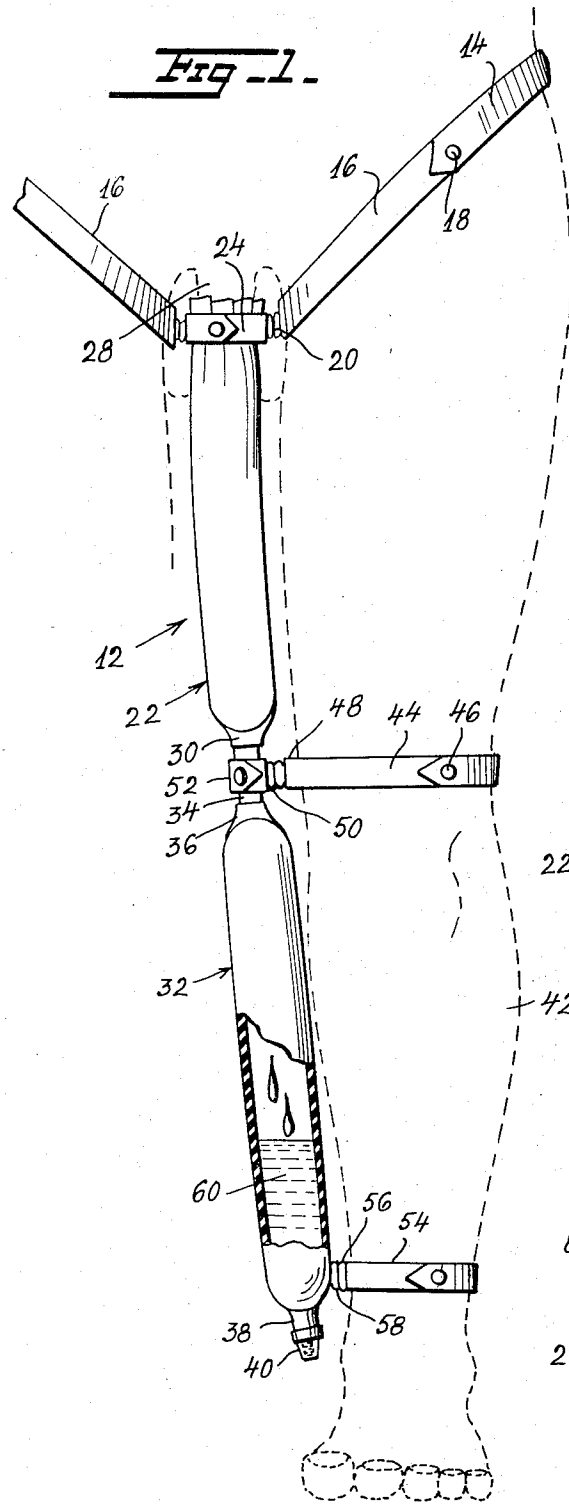


Fig - 3.

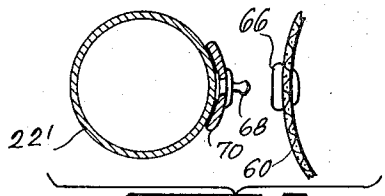


Fig - 2.

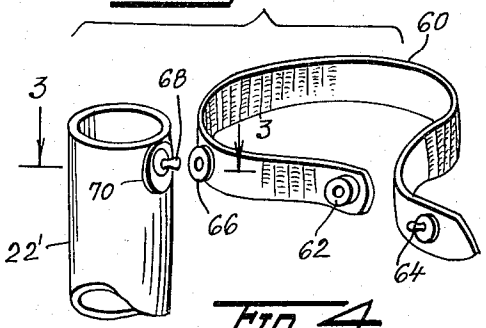


Fig - 4.

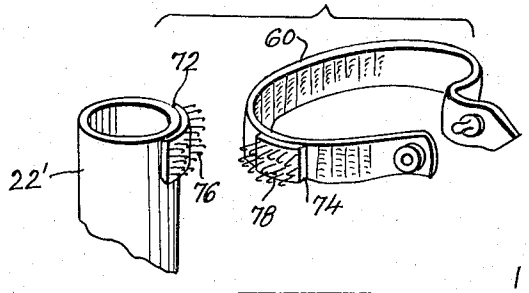
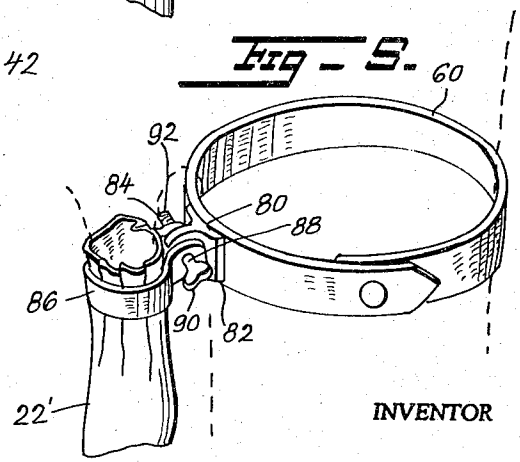


Fig - 5.



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INDIVIDUAL URINARY APPLIANCE

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Fig - 6.

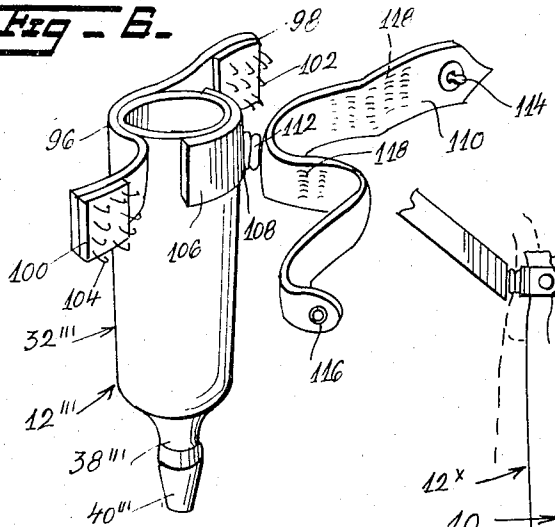


Fig - 9.

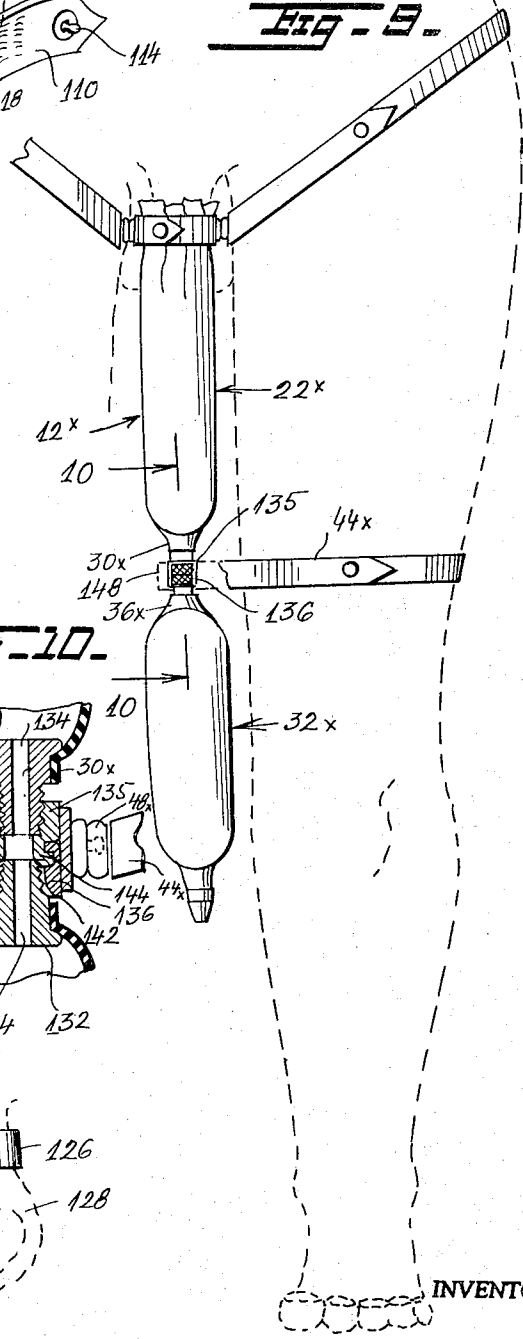


Fig - 7.

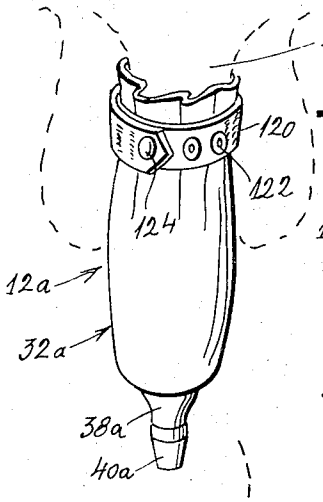


Fig - 10.

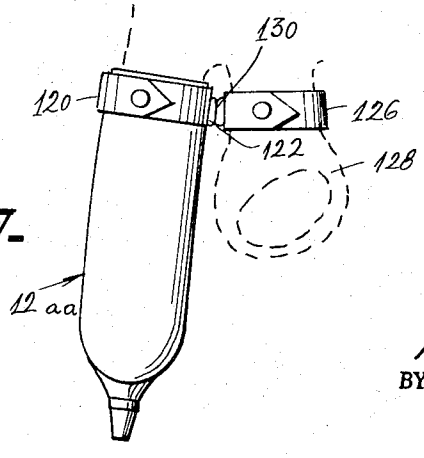


Fig - 8.

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Fig. 11.

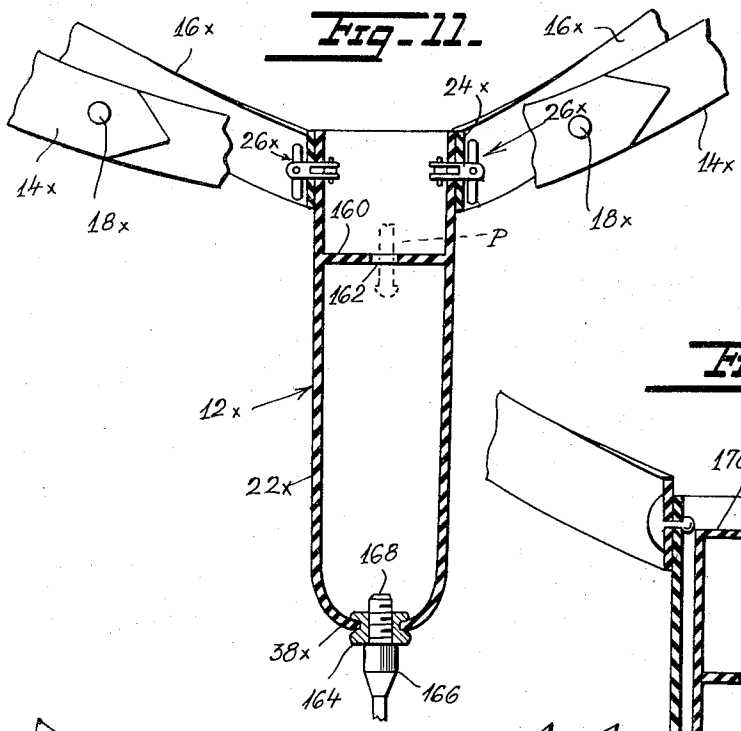


Fig. 12.

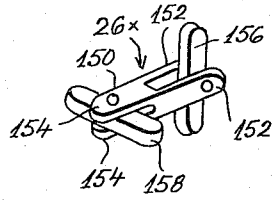
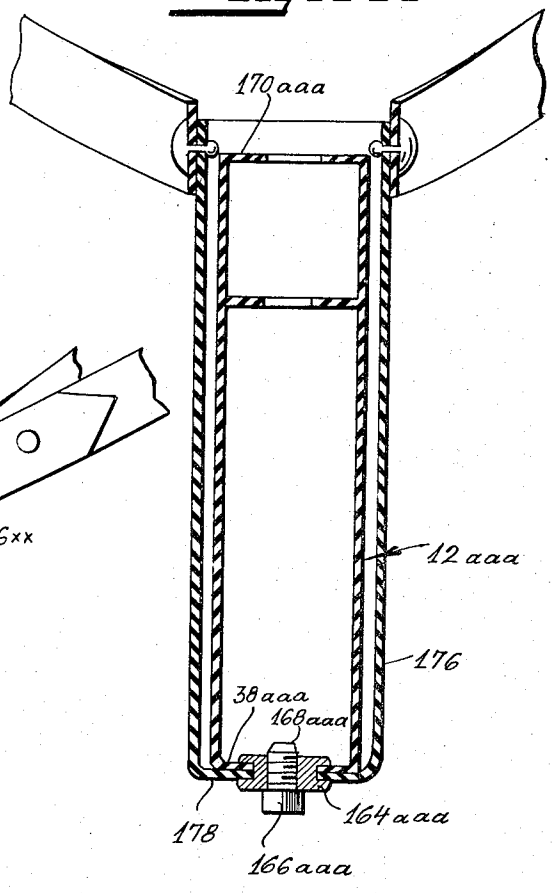


Fig. 14.



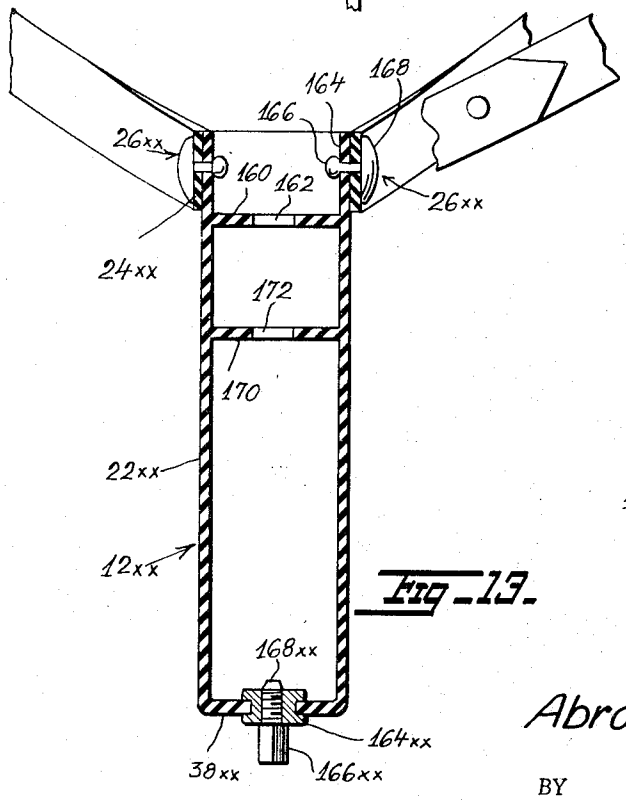


Fig. 13.

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3,357,430

INDIVIDUAL URINARY APPLIANCE

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Filed May 16, 1966, Ser. No. 550,436
8 Claims. (Cl. 128—295)

ABSTRACT OF THE DISCLOSURE

A urinary appliance having an elongated reservoir for urine with means for readily and removably attaching the reservoir to the penis and to a leg of the body of the wearer. The reservoir is constituted by a tubular member suspended from the hips of the wearer.

This invention relates to new and useful improvements in urinary appliances.

An important object of the present invention is to provide an elongated reservoir for urine with means for readily and removably attaching the same to the penis and to a leg of the wearer.

Another object of the invention is to provide a urinary appliance of this kind having an elongated tubular member for attachment to the penis of the wearer in suspended relation and having an elongated reservoir for the urine operatively connected to the tubular member in suspended relation adapted to be connected to a leg of the wearer.

Still another object of the invention is to provide a urinary appliance of this kind with means for wearing the same in suspension on the hips of the wearer.

Yet another object of the invention is to provide a urinary appliance of this type with a two-point connection to a leg of the wearer.

Other objects of the invention are to provide a urinary appliance that is efficient in use, comfortable, sanitary, waterproof, and affording a feeling of peace of mind to the wearer.

For further comprehension of the invention and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIGURE 1 is a front elevational view of a urinary appliance embodying the invention in position on a wearer, parts being shown broken away.

FIG. 2 is a detail disassembled perspective view of a modified form of connection between the leg strap and the pipe connecting the tubular member and reservoir.

FIG. 3 is a sectional view taken on the plane of the line 3—3 of FIG. 2.

FIG. 4 is a view similar to FIG. 2 of another modified form of connection.

FIG. 5 is a detail assembled perspective view of still another modified form of connection.

FIG. 6 is an assembled detail perspective view of yet another modified form of connection.

FIG. 7 is an assembled perspective view of still another modified form of urinary appliance shown in position on the penis of the wearer.

FIG. 8 is an assembled side elevational view of yet another modified form of urinary appliance shown in position on the penis and testicles of the wearer.

FIG. 9 is a view similar to FIG. 1 showing a modified form of connection between the tubular member and reservoir, and

FIG. 10 is a vertical sectional view taken on the line 10—10 of FIG. 9.

FIG. 11 is a vertical sectional view of a urinary appliance embodying yet another modified form of the invention.

FIG. 12 is a detail perspective view of the collar button use in FIG. 11.

FIG. 13 is a view similar to FIG. 11 of a urinary appliance embodying a further modified form of the invention.

FIG. 14 is a similar view of a urinary appliance embodying still another modified form of the invention.

Referring in detail to the various views of the drawings, in FIG. 1, a urinary appliance embodying one form of the invention is shown on the body 10 of a wearer and is designated generally at 12. The appliance 12 consists of strap sections 14 that engage around the hips and strap section 16 that engage around the crotch of the wearer, the sections being fastened by snap fasteners 18. The strap sections 16 carry snap fastener elements 20 at the crotch.

An elongated tubular member 22 of heavy waterproof rubber or plastic material is suspended from the strap sections 16 by means of a strap 24 fixed on the strap sections by means of snap fastener elements on the strap 24 engaging the snap fastener elements 20, on the strap sections 16. The strap 24 is suitably fastened to the top end of the tubular member 22. The top end of the tubular member is open to receive the penis 28 of the wearer and is preferably gathered to facilitate insertion of the penis therein. The other end of the tubular member 22 is open and tapered as indicated at 30.

A similar shaped heavy waterproof rubber or plastic reservoir 32 is removably connected to the tapered end 30 by means of a connecting rigid tube 34 of plastic or other suitable material, one end of the tube being inserted in the bottom tapered end 30 of the tubular member 22 and the other end of the tube being inserted into the open top tapered end 36 of the reservoir 32. The bottom open end of the reservoir is tapered as indicated at 38 and externally screw threaded to receive an internally screw threaded cap 40. The appliance is connected to and supported by a leg 42 of the wearer by means of a strap 44 encircling the leg near the knee and secured thereon by snap fastener 46. A snap fastener element 48 is carried by the strap 44 midway its ends adapted to coact with a snap fastener element 50 on a strap 52 around the tube 34.

A strap 54 around the ankle of the leg has a snap fastener element 56 midway its ends coacting with a snap fastener element 58 on the outer surface of the reservoir 32 adjacent the bottom end thereof for supporting the reservoir at the ankle.

In use, the urine 60 passes downwardly through the tubular guide member 22 through the tube 34 and into the reservoir 32 where it can be discharged by removing cap 40.

In FIGS. 2 and 3, a modified form of support for the top of the tubular member 22' is shown in the form of a strap 60 adapted to encircle one leg of the wearer at the top thereof adjacent the crotch. The ends of the strap are fastened by snap fastener elements 62 and 64. The strap is provided with a female snap element 66 on its outer surface intermediate its ends adapted to coact with a male snap fastener element 68 fastened to a fabric patch 70 fastened to the tubular member 22' adjacent its top open end.

In FIG. 4, another modified form of support for the top of the tubular member 22'' is shown which differs from the support shown in FIGS. 2 and 3 merely in that in place of the coating snap fastener elements 66 and 68, there is a connection known in the trade as a "Velcro" connection which includes tapes 72 and 74 on the tube 22' and on the strap 60, respectively.

The woven tape **72** is provided with radial semi-rigid monofilament nylon loops which are each cut at one side to form hooks **76**, while the other tape **74** is provided with closely woven loops **78**. When the tapes are pressed together the hooks **76** enter between the closely woven loops **78** and strongly grip such loops so as to retain releasably the tapes in pressed together relationship.

The modified form of support for the tubular member **22'** shown in FIG. 5 differs from the support shown in FIG. 2 in that a bracket **80** takes the place of the snap fastener element **66** on strap **60**, the bracket having a curved base **82** and a perforated ear **84** radiating from the center thereof. Instead of a male snap fastener element such as the element **68** of FIG. 2, a split metal sleeve **86** encircles the tubular member **22'** at the top thereof, with the perforated ear **84** disposed between the ends of the ring, the split ends being perforated to receive a bolt **88** extending through the aligned performations in the split ends and ear, the bolt having a wing-shaped head **90** at one end, the other end **92** being threaded. The ring **86** is adjustably fastened around the top gathered end of the tubular member **22'**.

In FIG. 6 a modified form of urinary appliance **12'''** is shown comprising a reservoir **32'''** having a hollow cylindrical body open at the top and having a tapered open end **38'''** at the bottom threaded to receive a threaded removable cap **40'''**. At the top, a strap member **96** is secured midway its ends to the outer surface of the body of the tubular member at one side thereof. A tape **98** is secured to the inner surface of one free end of the strap member and a similar tape **100** is secured to the other free end on the inner surface thereof. Tape **98** is provided with nylon hooks **102** radiating therefrom and tape **100** with radiating nylon hooks **104**. A tape **106** is secured to the opposite side of the tubular member at its top and is provided with a snap fastener element **108** on its outer surface. A strap **110** is fastened to the tape **106** midway its ends by means of a snap fastener element **112** engaging the snap fastener element **108** on tape **106**. The free ends of the strap **110** are adapted to be fastened to each other by means of the snap fastener elements **114** and **116** thereon. On its inner surface, the strap **110** is provided with clusters of nylon loops **118** closely removed from the free ends thereof which loops are adapted to coact with the hooks **102** and **104** on the tapes **98** and **100** whereby the reservoir **32'''** is adapted to be supported by the strap **100**, which encircle the leg of the wearer.

In FIG. 7 still another modified form of urinary appliance **12*a*** is shown comprising a reservoir **32*a*** having hollow cylindrical body open at the top and having a tapered open end **38*a*** at the bottom threaded to receive a threaded removable cap **40*a***. The top of the reservoir is fastened around the penis **28*a*** by means of a strap **120** having a series of female snap fastener elements **122** around the outer surface of the body of the strap and a male snap fastener element **124** projecting from the inner surface adjacent one end thereof for coaction with the female snap fastener elements to adjustably fasten the reservoir on the penis.

Yet another modified form of urinary appliance **12*aa*** is shown in FIG. 8 which differs from the appliance **12*a*** of FIG. 7 merely in that a second strap **126** is provided for fastening to the testicles **128** of the wearer, which strap is snapped into connection with the strap **120** by means of a male snap fastener element **130** secured to the outer surface thereof coacting with the female snap fastener elements **122** on the strap **120**.

The modified form of urinary appliance **12*x*** shown in FIGS. 9 and 10 differs from the urinary appliance **12** of FIG. 1 merely in the connection between the bottom end **30*x*** of the tubular member **22*x*** and the top end **36*x*** of the reservoir **32*x***. This connection in appliance **12*x*** includes externally threaded metal plugs **130** and **132** in the ends **30*x*** and **36*x***, respectively. Each plug has a central bore **134**, said bores being in alignment. An internally screw threaded sleeve **135** is mounted on the bottom threaded end of upper plug **130** and a similar internal screw threaded sleeve **136** is mounted on the top end of the threaded end of bottom plug **132** as viewed in FIG. 10. The upper sleeve **135** is formed with an annular groove **138** on its outer surface to receive an inner annular flange **140** on the bottom sleeve **136** formed by an annular groove **142** on the inside of said bottom sleeve, which groove **142** receives the annular flange **144** on the top sleeve formed by its annular groove **138**. A strap **148** encircles the sleeves **135** and **136** and carries a snap fastener element **150** on the outer surface thereof coacting with a complementary snap fastener element **48*x*** on the strap **44*x*** encircling the leg of the wearer.

With particular reference to FIGS. 11 and 12, herein is shown still another modified form of urinary appliance **12*x***. The appliance includes garters or strap sections **14*x*** that engage around the hips and strap sections **16*x*** that engage around the crotch of the wearer, the sections being fastened by snap fasteners **18*x***.

An elongated tubular member **22*x*** similar to tubular member **22** of FIG. 1 is suspended from the strap sections **16*x*** by means of a strap **24*x*** fixed on the strap sections by means of hinged collar buttons **26*x*** extending through aligned openings in the strap section **16*x*** and strap **24*x***. The buttons **26*x*** are shown in detail in FIG. 12 and each includes a body **150** bifrucated at one end forming bifurcations **152**, **152** extending in one plane, and bifurcated at the other end forming bifurcations **154**, **154** extending in a plane perpendicular to the plane of the ends **152**. A pin **156** is pivoted to the bifurcations **152** midway the ends of the pin, and another pin **158** is pivoted to the bifurcations **154** midway the ends of the pin **158**. By reason of this construction either pin can be swung into elongation with the body of the button and inserted through the aligned openings in the straps **16*x*** and **24*x*** and then swung at right angles to the body as seen in FIG. 11, the other outer pin being disposed at right angles to the body of the button thereby securing the tubular member **12*x*** to the straps. The tubular member **22*x*** is closed adjacent the top by means of a partition wall **160** with a central hole **162** therein for accommodating the penis P of the wearer.

The tubular member **22*x*** constitutes a reservoir and has a tapered bottom end as indicated at **38*x*** with an opening therein which is plugged by an internally screw threaded bushing **164** plugged by a cap **166** having an externally threaded shank **168**.

Another modified form of urinary appliance **12*xxx*** is shown in FIG. 13 which differs from the ordinary appliance **12*x*** of FIG. 11 in that the reservoir **22*xx*** is formed with a second partition wall **170** spaced inwardly from the partition wall **160**, said second partition wall having a central hole **172** aligned with the hole **162** in partition wall **160**. Furthermore, the bottom wall **38*xx*** of the reservoir **22*xx*** is flat instead of being tapered. The means for fastening the reservoir **22*xx*** to the strap **24*xx*** comprises a collar button **26*xx*** of ordinary construction having a shank **164** with a small sphere **166** at one end and an enlarged flat head **168** at the other end, the shank extending through the aligned holes in the strap and top end of the reservoir. The bottom wall **38*xx*** of the reservoir is flat with a central opening plugged by a threaded bushing **164*xx*** closed by a cap **166*xx*** having a threaded shank **168*xx***.

Yet another modified form of urinary appliance **12*aaa*** is shown in FIG. 14 which differs merely from the appliance **12*xx*** of FIG. 13 in that an outer tubular carrier case **176** houses the reservoir **12*aaa***, the bottom end wall **38*aaa*** of the reservoir being attached to the bottom wall **178** of the case by the bushing **164*aaa*** extending through aligned holes in said bottom walls. A threaded cap **166*aaa*** with shank **168*aaa*** plugs the bushing. In reservoir **12*aaa***, the second partition wall **170*aaa*** is across the top of the

body of the reservoir and not spaced inwardly as in the body of reservoir 12*xx*.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

What is claimed is:

1. A urinary appliance of the kind described including an elongated reservoir for holding urine, said reservoir having a cylindrical hollow body open at both ends thereof, means for operatively connecting the open end of the body to the penis of the wearer, the other open end of the reservoir serving as a discharge opening, a removable cap for closing said discharge opening, and means for attaching and supporting the reservoir on a portion of the body of the wearer of the appliance wherein the operative means of connection between the reservoir and penis of the wearer includes an elongated tubular member open at both ends thereof, a tube connecting the adjacent open ends of the tubular member and body of the reservoir, the other end of the tubular member adapted to receive the penis of the wearer, a strap around the other end of the tubular member for fastening the tubular member to the penis, opposed snap fastener elements on the outer surface of the strap, and other strap sections encircling the hip and upper portion of the legs of the wearer at the crotch of the wearer, said other strap sections carrying complementary snap fastener elements coacting with the snap fastener elements on the strap.

2. A urinary appliance of the kind described in claim 1, wherein the means for attaching and supporting the reservoir on a leg of the wearer of the appliance includes a strap secured midway its ends to the outer surface of the reservoir at its one end on one side thereof, tapes on the ends thereof on the inner surface thereof, nylon hooks radiating from said tapes, a tape secured to the outer surface of the reservoir at its one end on the other side thereof, a snap fastener element mounted on said latter tape, a strap having a snap fastener element midway its ends coacting with the snap fastener element on the latter tape, said latter strap having nylon hoops radiating from its inner surface adjacent the ends thereof adapted to coact with the nylon hooks on the first-named straps, said last named strap having means for fastening the same around the leg of a wearer.

3. A urinary appliance of the kind described in claim 1, wherein the means for attaching and supporting the reservoir on a leg of the wearer of the appliance includes a split metal ring around the said end of the reservoir, the free ends of said ring being perforated, a strap for mounting on the leg of a wearer, a metal bracket on the outer surface of the strap intermediate its ends, said bracket having a radiating perforated ear, disposed between the perforated ends of the ring, the perforations in the ring ends and ear being in alignment and a threaded bolt extending through the aligned perforations.

4. A urinary appliance of the kind described in claim 1, wherein the means for attaching and supporting the reservoir on a portion of the body of the wearer of the appliance includes a strap around said one end of the reservoir having a snap fastener element adjacent one end thereof, a snap fastener element intermediate the ends adjacent the other end thereof coacting with the first-named snap fastener element, another snap fastener element on the strap midway its ends, and another strap

adapted to be mounted on the testicles of the wearer of the appliance, said other strap having means for fastening the ends thereof to each other and a snap fastener element on said other strap intermediate its ends for coaction with the snap fastener element on the first named strap intermediate its ends.

5. A urinary appliance as defined in claim 1, wherein the operative means of connection between the reservoir and penis of the wearer includes an elongated tubular member open at both ends thereof, means of connection between the adjacent open ends of the tubular member and body of the reservoir, the other end of the tubular member adapted to receive the penis of the wearer, a strap around the other end of the tubular member for fastening the tubular member to the penis, said means of connection between the open ends of the tubular member and reservoir including a threaded plug in each of the adjacent ends of the tubular member and reservoir, said plugs each having a central bore, in alignment, aligned internally threaded sleeves around said plugs, a strap around said sleeves and a snap fastener element on said strap adapted to coact with a snap fastener element on a strap around the leg of the wearer.

6. A urinary appliance as defined in claim 1, wherein the reservoir is constituted by a tubular member open at both ends, a partition wall across the tubular member remote from the top open end thereof, said partition wall having a central hole therein for accommodating the penis of the wearer, hinged collar buttons fastening the top open end of the tubular member to the straps over the crotch, and means for closing the bottom open end of the tubular member.

7. A urinary applicance as defined in claim 1, wherein the reservoir is constituted by a tubular member open at both ends, a partition wall across the tubular member remote from the top open end thereof, a second partition wall across the tubular member spaced inwardly from the first-named partition wall, said walls having aligned openings therein, collar buttons fastening the top open end of the tubular member to the straps over the crotch, and means for closing the opening in the bottom end of the tubular member.

8. A urinary appliance as defined in claim 1, wherein the reservoir is constituted by a tubular member closed top and bottom, said top and bottom having holes therein, a partition wall across the tubular member inwardly from the top thereof, said partition wall having a hole aligned with the hole in the top of the tubular member, a tubular carrier case enclosing said tubular member, said case being open at the top and closed at the bottom, said bottom having a hole aligned with the hole in the bottom of the tubular member, and rigid collar buttons fastening the top end of the carrier case to the straps over the crotch, and means for closing the holes in the case and reservoir.

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