

April 9, 1968

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3,376,864

ABDOMINAL BELT AND ATHLETIC SUPPORTER

Filed Oct. 20, 1965

2 Sheets-Sheet 1

FIG. 1

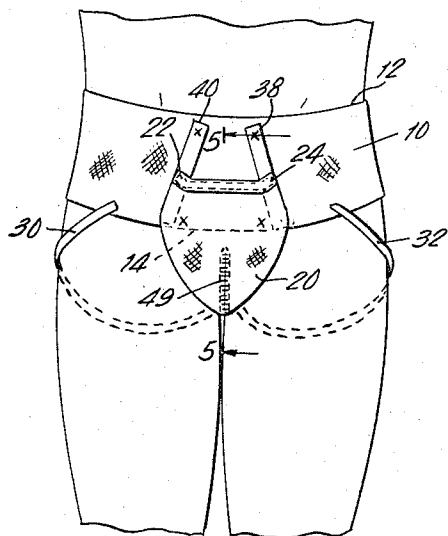


FIG. 2

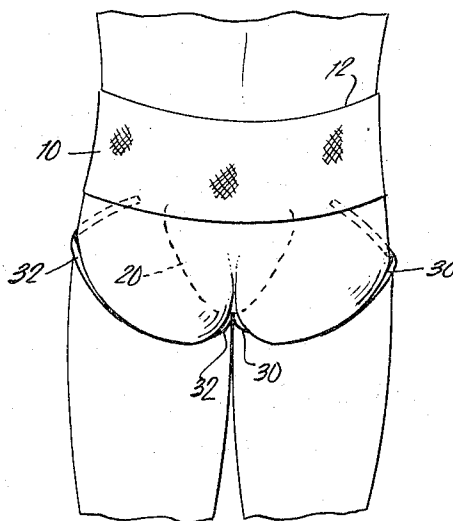


FIG. 3

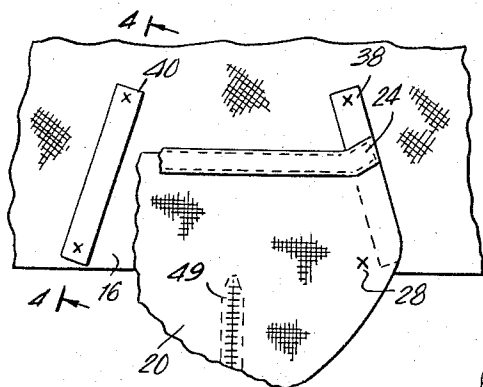


FIG. 6

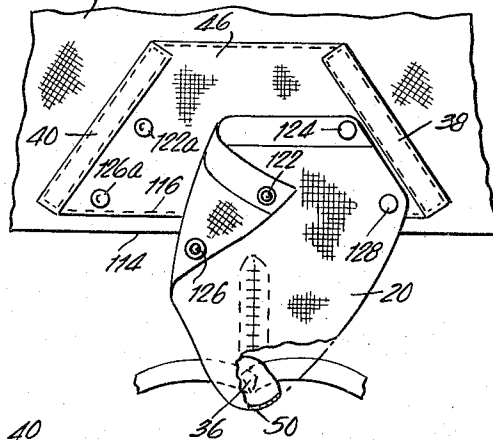


FIG. 4

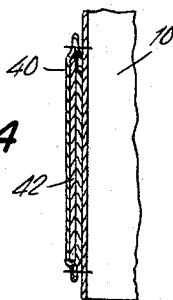
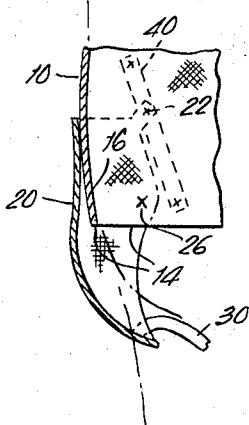


FIG. 5



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FIG. 7

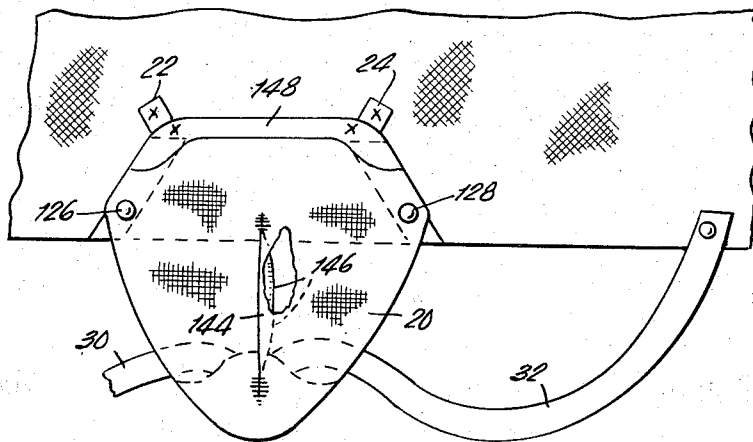


FIG. 8

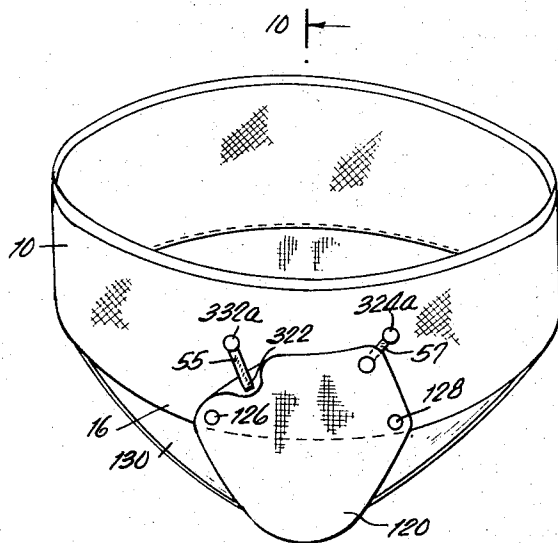
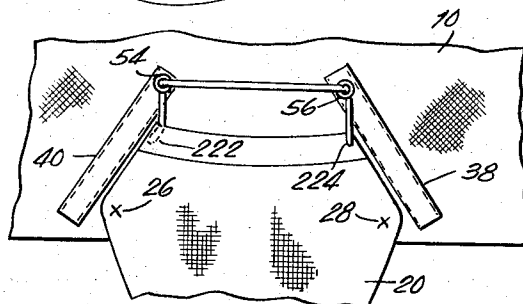


FIG. 9

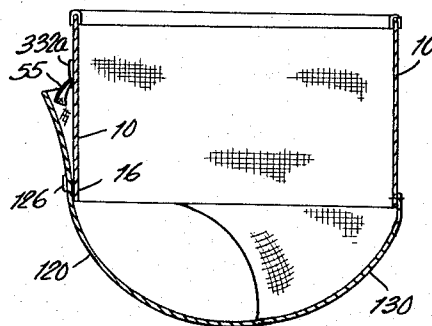


FIG. 10

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3,376,864 ABDOMINAL BELT AND ATHLETIC SUPPORTER

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Filed Oct. 20, 1965, Ser. No. 498,931
10 Claims. (Cl. 128—161)

This invention relates to a combination abdominal belt and athletic supporter, and more particularly to a device for supporting the abdomen and especially the inguinal portion of the abdomen, in combination with a suspensory pouch member.

A disadvantage which is common to all of the suspensories and jock straps of the prior art is that they do not provide a support for the inguinal portion of the abdomen, and the suspensory pouch member provided actually interferes with any possible supporting action by the belt of the inguinal portion of the abdomen. The pouch member which forms the suspensory in the prior art is customarily attached to the bottom of the body-encircling belt, and the belt begins where the pouch member ends. The pouch member is designed to hold the testicles and the penis; and therefore the lower edge of the belt, being joined to the upper edge of the pouch member, cannot extend across and against the inguinal portion of the abdomen. Thus, in the conventional athletic supporter or jock strap, the inguinal portion of the abdomen, which in many cases needs retaining support more than the upper portion of the abdomen, does not even come in contact with the body-encircling belt, since said inguinal portion is blocked off and the belt is held away from the body by the pouch with the genital organs of the wearer. Thus, most athletic supporters are built in such a manner that the bottom edge of the belt, in normal wearing position, begins several inches above the groin, and the belt then extends upwardly therefrom. The devices of the prior art thus cannot furnish any direct, flush support where it is most needed, namely against the groin and lowermost or inguinal portion of the abdomen. If the devices of the prior art are pulled down at the front in an attempt to exert a beneficial pressure on the groin area, this relaxes and renders ineffective the suspensory pouch and also renders the body-encircling belt uncomfortable; and furthermore, the latter would tend to move from such position, especially during active physical exercise.

It is therefore an object of this invention to overcome the above-mentioned difficulties and disadvantages of the prior art.

Another object of the invention is to provide a device which has a comfortable nesting place for the testicles of the wearer, while also providing support for the inguinal portion of the abdomen, and while leaving the penis in unconfined freedom and comfort.

Another object of the invention is to provide simple and inexpensive means for permitting the upper portion of the pouch member to be displaced away from the belt to which it is fastened, out of the way for water closet purposes.

To these ends, and in accordance with one feature of the invention, the device is constructed in such a manner that the body-circling band or belt has a lower edge which extends down to the lower limit of the abdomen, covering the abdomen substantially completely, down to the vicinity of the base of the penis. A pouch member is then attached to the belt by means of spot attachments, such as buttons, hooks, snaps or sewing, on the right and left sides of the pouch member. These spot attachments, preferably, join the bottom of the belt to points approximately midway between the bottom and top of the pouch member. In addition, upper spot at-

tachments also join the upper corners of the pouch member to points higher up on the belt, approximately along a horizontal median line of the belt. In this manner, the testicles can rest in the pouch member, and the penis can extend upwardly within the pouch, between the belt and the pouch member. The upper portion of the pouch member is continued upwardly over and free of the lower portion of the belt, and is fastened by the above-mentioned upper spot attachments placed at approximately the horizontal median line of the belt and joined to the upper two corners of the pouch member. This arrangement insures access of air to the interior of the pouch member, provides a certain amount of freedom of the penis, prevents pulling away of the lower portion of the belt from the body by the genital organs, and provides maximum flexibility.

According to another feature of the invention, the pouch member is provided with a fly opening in the forward portion thereof.

According to a further feature of the invention, an elastic stretchable member is positioned at the upper spot attachments, intermediate the belt and the pouch member, to permit easy pulling of the top of the pouch member forward for water closet purposes.

According to still another feature of the invention, the elastic stretchable member comprises a cord which extends from one corner of the pouch member upwardly through a plurality of loops fastened to the belt and then downwardly to another corner of the pouch member to allow greater stretch of the elastic member and more easy pulling away of the upper portion of the pouch member from the belt.

According to still another feature of the invention, the forward portion of the belt is provided with a stiffening reinforcing panel at the forward lower portion thereof.

According to still another feature of the invention, in place of perineal straps extending from the belt to the lower portion of the pouch member, the perineal straps are incorporated into fabric forming a buttock-covering member.

The foregoing and other objects, advantages and features of my invention, these features being set forth with particularity in the claims annexed hereto, will become more apparent from the following description in conjunction with the embodiment of a combination abdominal belt and athletic supporter according to the invention, illustrated by way of example of the accompanying drawings, in which:

FIG. 1 is a front perspective view of a device according to the invention, shown in position on the wearer;

FIG. 2 is a rear view of the device of FIG. 1;

FIG. 3 is an enlarged fragmentary detail of the front center portion of the device of FIG. 1;

FIG. 4 is a fragmentary cross section taken along line 4—4 of FIG. 3;

FIG. 5 is a cross section taken along line 5—5 of FIG. 1;

FIG. 6 is a fragmentary front elevation view of a modification of the device of FIG. 1;

FIG. 7 is a fragmentary front elevation view of another modification of the device of FIG. 1;

FIG. 8 is a fragmentary front elevation view of a further modification of the device of FIG. 1;

FIG. 9 is a front perspective view of another modification of the device of FIG. 1; and

FIG. 10 is a vertical cross section taken along the plane of line 10—10 of FIG. 9.

In the drawings, the same reference characters are used in all illustrations for the same or functionally similar components.

The combination abdominal belt and athletic supporter according to the invention comprises a body-encircling belt, generally designated in the figures as **10**, and having a front upper edge **12** and a front lower edge **14**. As best shown in FIG. 5, the front lower portion **16** of the belt, adjacent to the lower edge **14**, is positionable so as to extend across and against the inguinal portion of the abdomen when the device is in normal wearing position on the body of a wearer. A pouch member **20** is secured to the belt **10** by either permanent or detachable fastening means. In the embodiment of FIG. 1, these fastening means are shown as permanent spot attachments such as by sewing, provided along the upper edge of the pouch **20** at least at the corners **22**, **24** thereof. Further spot attachments at **26** and **28**, about midway between the bottom and top of the pouch member **20**, attach the sides of the pouch **20** to the portion **16** of the belt, at or slightly spaced from the bottom edge **14** of the belt (FIG. 5).

Perineal straps **30**, **32**, preferably of stretchable fabric material, extend between the lower edge **14** of the belt **10**, around the legs of the wearer, between the thighs, and are attached to the lower portion of the pouch member **20** at **36**. As may be seen from the illustrations in FIGS. 1, 2, 5 and 7, the straps **30**, **32** are joined to the rear of the pouch **20** at one respective strap end, and to the rear side portion of the belt **10** at another respective end of the straps **30**, **32**. Similarly, when the straps or perineal means **30**, **32** become part of underwear pants as at **130** of FIGS. 9 and 10 the same general function is achieved by attaching the lower portion of the pouch member **120** at one end of the perineal means **130** and joined to the rear side portion of the belt **10** at the other end of the perineal means **130**.

In FIG. 3, the left portion of the pouch member **20** has been cut away to better illustrate reinforcing members **38**, **40**, sewn to the belt **10**, and which are provided to help stiffen the belt **10**. The fastening means **22**, **24**, **26**, **28**, in the embodiment of FIGS. 1, 2 and 3 are attached to the belt at or near these reinforcing members **38**, **40**. As shown in FIG. 4, a steel stiffener member **42** may be sewn within the fabric covering of the reinforcing members. A soft fabric reinforcing or stitching **44** may be sewn over the inside and/or outside of the central middle portion of the pouch member **20**, as shown in FIGS. 1, 3 and 6.

As best shown in FIG. 5, the belt **10** defines a front lower portion **16** thereof which is positionable so as to normally extend horizontally across and supportingly resting directly against the inguinal portion of the abdomen of the wearer. The pouch member **20** defines an upper pouch portion thereof, as may be seen in FIGS. 5 and 10, normally in mutual overlapping contiguous positions relative to the front lower portion **16** of the belt **10**, and normally disposed on the outside of the belt **10** with respect to the said inguinal abdominal portion of the wearer. It is to be particularly noted that the pouch member **20** does not hang or depend from the bottom edge **14** of the belt **10**, but instead the upper portion of pouch **20** lies in a different geometric plane from the lower belt portion **16**, as considered along an imaginary vertical line extending vertically along their mutually overlapping positions (see FIG. 5). As may be seen from the drawing, between the distinct spaced fastening locations such as **22**–**26** as seen in FIG. 5, **24**–**28** as seen in FIG. 3, **22**–**24** as seen in FIG. 1 and **124**–**128** as seen in FIG. 6, etc., along these spaces between the pouch member **20** and the belt **10** the pouch is not fastened to the belt. This structure makes possible some lateral and vertical displacement of the upper pouch portion of pouch **20** relative to the lower belt portion **16**.

As a result, the lower front portion **16** of the belt **10** provides supporting pressure directly against the inguinal portion of the abdomen of the wearer while the pouch member **20**, since it does not hang or depend directly from the base of the belt, is freely movable relative to the belt **10**, without depending directly from it, and thus provides

a comfortable movable support for the genital organs of the wearer without excessive upward pull on the pouch from the closure means.

In the embodiment of FIG. 6, a reinforcing panel **46** is sewn into the belt **10** to stiffen the front portion thereof.

Although the fastening means in any of the embodiments may comprise snap fasteners, these are illustrated, only by way of example, in the embodiment of FIG. 6, in which the snap fasteners are indicated at **122**, **124**, **126**, **128**. The snap fasteners **122** and **126** on the pouch member engage corresponding snap fasteners **122a** and **126a** attached to the reinforcing panel **46** of the belt **10** or to the belt itself. It will be noted, particularly in FIG. 6, that the portions of the pouch member **20** between the fasteners are not attached to the belt. For example, the upper edge **48** between the fasteners **122** and **124** of the pouch member remains free and unattached. Likewise, the portion of the pouch member **20** between the snap fasteners **122** and **126** likewise remains free and unattached. In FIG. 6, the snap fasteners **122** and **126** are illustrated as being detached and open, with the left corner of the pouch member arranged forwardly for better illustration of the construction.

In the embodiment of FIG. 7, a fly opening is inserted in the central portion of the pouch member **20**, with an overlapping flap **146**, shown partially cut away for illustrative purposes. In this embodiment of FIG. 7, the portion **148** of the pouch member **20** extending between the spot fastenings **22** and **24** is unattached, although the fastenings **22**, **24** are permanently fixed to the belt **10**.

As best shown in FIG. 6, the snap fastenings **126**, **128** are located on a horizontal plane approximately midway between the bottom **50** and the top **52** of the pouch member **20**. The upper spot attachments **122**, **124** and their corresponding snap attachments **122a** are located approximately a horizontal median line of the belt **10** midway between the lower and upper edges of the belt. As is clearly shown in FIG. 6, the upper and lower snap attachments **122**, **124** and **126**, **128** are spaced from each other and arranged as the corners of a quadrangle. This thus provides access of air to the interior of the pouch.

In the embodiment of FIG. 8, an elastic cord **52** is utilized to provide still more freedom and flexibility of the upper portion **148** of the pouch member **20**. One end of the elastic cord **52** is attached at **222** to one corner of the upper band **148** of the pouch **20**, and the other end of the elastic cord **52** is attached to another corner **224** of the upper band **148**. The cord **52** is strung through a plurality of eyelets or loops **54**, **56** in such a manner that the elastic cord can be pulled through without undue binding or friction. Since the elastic cord **52** is of a greater length than the distance between the corners **222** and **224**, it will permit greater and easier stretching than merely an elastic band sewn in a straight line between these two points **222** and **224**.

FIGS. 9 and 10 illustrate how a device according to the invention can be incorporated into underwear pants while providing comfortable support for the inguinal portion of the abdomen as well as a suspensory for the genitals. Instead of the perineal straps **30**, **32**, a buttocks-covering fabric portion **130** is provided between the band portion **10** and the pouch member **120**. The snap fastenings for attaching the pouch member **120** to the belt **10** may be of any of the types above-described with relation to FIGS. 1–8, or, as illustrated in FIGS. 9 and 10 for the sake of example only, may be fasteners **322a** and **324a**, fixed to the band **10**, from which elastic bands **55**, **57** extend respectively to fasteners **322** and **324** in the upper corners of the pouch member **120**. Either permanent or disjoinable fasteners **126**, **128** located at the median of the pouch **120** between the bottom and top of the latter, join the pouch **120** between the bottom and top of the latter, join the pouch to the lower portion **16** of the belt.

It will be obvious to those skilled in the art, upon a study of this disclosure that this invention permits of vari-

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ous modifications and alterations with respect to the individual components and arrangements disclosed, and hence can be embodied in underwear, jock straps, suspensories and abdominal supports other than as particularly illustrated and described herein, without departing from the essential features of the invention and within the spirit and scope of the claims annexed hereto.

I claim:

1. A combination abdominal belt and athletic supporting device comprising, in combination, a relatively wide belt adapted to encircle the body of the wearer, said belt being of a width adapted to extend over the major portion of the lower abdomen of the wearer, said belt defining a front lower portion thereof positionable so as to normally extend horizontally across and supportingly resting directly against the inguinal portion of the abdomen of the wearer, a pouch member defining an upper pouch portion normally in mutual overlapping contiguous positions relative to said front lower portion of said belt and normally disposed outside of said belt with respect to said inguinal abdominal portion of the wearer, said pouch member and said belt together carrying cooperating closure means comprising a plurality of distinct spaced fastening spot locations disposed above said front lower portion of said belt and arranged so as to permit lateral and vertical displacement of said upper pouch portion relative to said lower belt portion at said mutual overlapping positions thereof, said front lower portion of said belt and of said upper pouch portion being normally disposed in different geometric planes at a line considered vertically along their respective mutually overlapping positions, whereby said lower front portion of the belt provides supporting pressure directly against the inguinal portion of the abdomen of the wearer while said pouch member is freely movable relative to said belt without depending directly therefrom to provide a comfortable movable support for the genital organs of the wearer without excessive upward pull thereagainst from said closure means.

2. Device according to claim 1, said front lower portion of the belt extending downwardly to the vicinity of the base of the penis of the wearer.

3. Device according to claim 1, said pouch member having means forming a fly opening in the forward portion thereof.

4. Device according to claim 1, said closure means including spot attachments joining said pouch member to

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said belt, one pair of said spot attachments being located at points approximately midway between the bottom and top of said pouch member, others of said pair of spot attachments joining said points to the overlapping portion of said pouch member and of said front lower portion of said belt.

5. Device according to claim 4, said closure means further including other spot attachments joining the upper portion of said pouch member to said belt, said spot attachments being arranged as corners of a quadrangle.

6. Device according to claim 1, said closure means including spot attachments located intermediate the bottom and top of said pouch member, said spot attachments joining said pouch member to said belt, and other spot attachments joining the upper portion of said pouch member to said belt.

7. Device according to claim 6, said closure means including an elastic stretchable member intermediate said belt and said pouch member.

8. Device according to claim 7, said means including a plurality of loops, said stretchable member comprising an elastic cord extending and spaced upwardly from one side of the upper portion of said pouch member through said loops and downwardly to the other side of said pouch member.

9. Device according to claim 1, said belt including a stiffening reinforcing panel fastened at the forward portion thereof, at least some of said closure means extending between said stiffening panel and said pouch member.

10. Device according to claim 1, said perineal means comprising thigh-encircling and buttocks-covering fabric for connecting and supporting the lowermost portion of said pouch member to said belt while avoiding pulling action transmitted along said perineal means to said pouch member in an upward direction.

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