



(72) QI, XIAOMING, CN

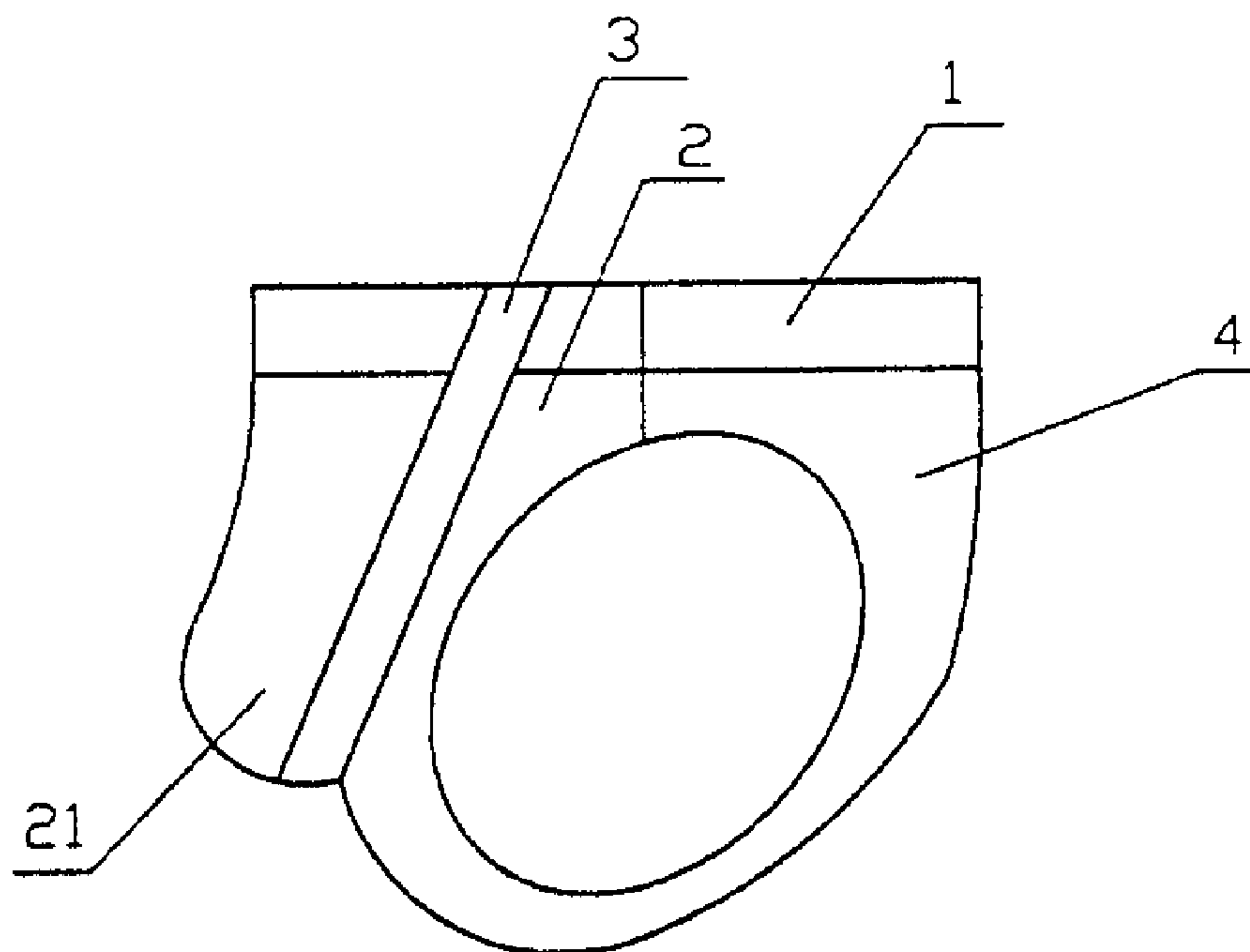
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(54) **SLIP POUR HOMME ET DOUBLURE ASSOCIEE**

(54) **A KIND OF MAN'S BRIEFS AND LINING OF THE BRIEFS**



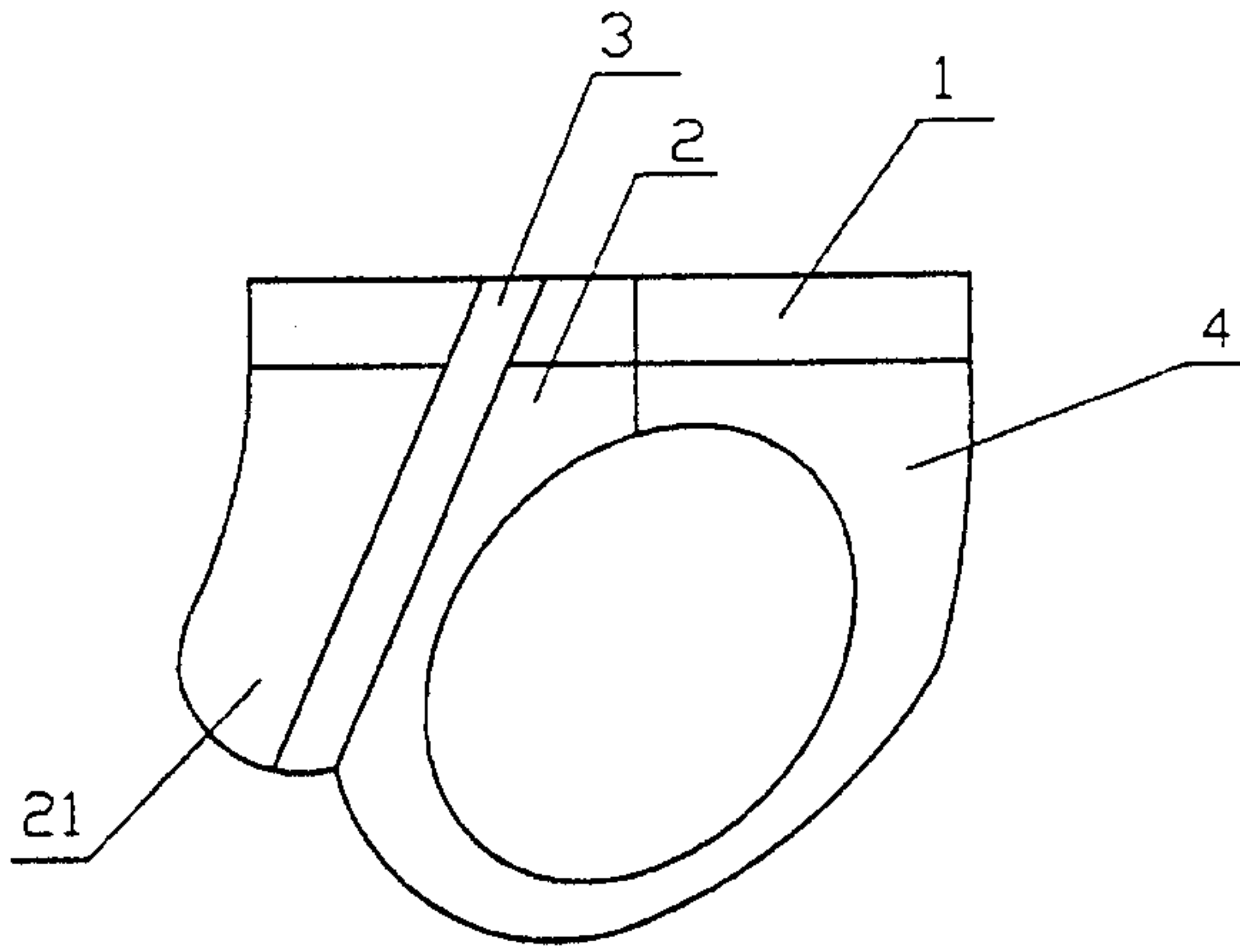
(57) L'invention concerne un slip pour homme et sa doublure comprenant une partie taille, une partie avant et une partie arrière. Ce slip est caractérisé en ce que la partie avant est reliée à une bande de support. La partie inférieure de la bande de support est arquée et forme un sac entre la partie inférieure de la position serrée des organes génitaux et la partie supérieure des jambes de manière à rendre le port du slip plus confortable. Les deux extrémités de la bande de support s'éloignent l'une de l'autre et sont reliées à la partie avant et à la partie taille de manière à stabiliser la bande de support sans trop serrer les organes génitaux. La bande de support peut être réglée facilement. Le réglage de la largeur de l'ouverture de la bande de support ou de la longueur de la bande de support et de la tension de l'élastique permet d'adapter correctement le slip à l'utilisateur, ladite bande supportant les organes génitaux.

(57) A kind of man's briefs and lining of the briefs, comprising a waist section, a front section and a back section, where a support belt is connected to the front section. The bottom of the support belt has an arc shape, and forms a bag section between the bottom of the tightening position of the scrotum and the upper ends of the legs so as to facilitate supporting and holding. The two ends of the support belt flare up and are connected with the front section and the waist section to facilitate stability of the support belt and the supporting force. The support belt can be adjusted easily. By adjusting the width of the flared mouth of the support belt, the length of the support belt, or the tension of the elastic ribbon, a proper support position and a comfortable supporting force can be obtained.



PCT

按照专利合作条约(PCT)所公布的国际申请

(51) 国际专利分类号⁶: A41B 9/02	A1	(11) 国际公布号: WO99/63845 (43) 国际公布日: 1999年12月16日(16.12.1999)
(21) 国际申请号: PCT/CN99/00075 (22) 国际申请日: 1999年6月3日(03.06.1999) (30) 优先权: 98205905.1 1998年6月11日(11.06.1998) CN (71)(72) 发明人/申请人: 齐晓明(QI, Xiaoming) [CN/CN]; 中国北京市朝阳区和平街12区19楼1118号, 邮政编码: 100013, Beijing (CN). (74) 代理人: 北京三友专利代理有限责任公司(BEIJING SANYOU PATENT AGENCY CO., LTD.); 中国北京市 北三环中路40号, 邮政编码:100088, Beijing (CN).		(81) 指定国: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO专利(GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), 欧亚专利(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI专利(BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG) 本国际公布: 包括国际检索报告。
(54) Title: A KIND OF MAN'S BRIEFS AND LINING OF THE BRIEFS (54) 发明名称: 男内裤及裤内衬 (57) Abstract A king of man's briefs and lining of the briefs, comprising a waist section, a front section and a back section, where a support belt is connected to the front section. The bottom of the support belt has an arc shape, and forms a bag section between the bottom of the tightening position of the scrotum and the upper ends of the legs so as to facilitate supporting and holding. The two ends of the support belt flare up and are connected with the front section and the waist section to facilitate stability of the support belt and the supporting force. The support belt can be adjusted easily. By adjusting the width of the flared mouth of the support belt, the length of the support belt, or the tension of the elastic ribbon, a proper support position and a comfortable supporting force can be obtained. 		

TITLE OF THE INVENTION**MAN'S BRIEFS AND LINING OF THE BRIEFS****FIELD OF THE INVENTION**

This invention is related to kind of protective underwear, specifically, it is a kind
5 of man' s briefs and lining of the briefs.

BACKGROUND TECHNOLOGY

It has been proved by medical science and practice that man' s testes will drop
down as the scrotum becomes loosened. While the testes drop to a certain extent,
they will be apt to be pressed and pushed by the upper ends of the legs. Especially,
10 when the man is at a sitting posture, this problem will not only make him
uncomfortable but also affect his health.

Existing man' s briefs are designed mainly considering their comfortableness such as
softness, lightness, and performance of sweat absorption, etc. while being worn.
Therefore, most of them are based on selection of materials, that is, comfortable
15 materials are adopted to make the briefs. But, even the briefs made by rather
comfortable materials, whether in triangular shape or in rectangular shape, do not
have the function to support and hold the scrotum above the upper ends of the legs,
and therefore can not solve the above mentioned problem.

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The Object of this invention is to provide a kind of man' s briefs and lining of the briefs which can control the extent of dropping of the scrotum and support and hold them above the upper ends of the legs, and thus prevent the testes from being pressed and pushed.

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CONTENTS OF THE INVENTION

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The technical plan of this invention is a support belt is added to the front section of the man' s briefs and lining. The bottom of the support belt has an arc shape, and forms a bag together with the bottom portion of the front section, i.e. the portion between the bottom of the tightening up section of the scrotum and the upper ends of the legs. Both ends of the support belt have flared shape and are diverged up, connected with the front section and the waist section to facilitate stability of the support belt and the support force. The support belt can be adjusted easily. It can be adjusted by changing the width of the flared mouth of the support belt, the length of the support belt or the tension of the support belt, so as to obtain a proper support position and a comfortable support force.

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When the man' s briefs and lining are put on , the bottom tightening section of the support belt is positioned between the bottom of the tightening portion of the scrotum and the groins above the upper ends of the legs by adjusting the support belt, and thus resists dropping of the testes. While the support belt resists the dropping of the scrotum, it also offers support function together with the bag, which is formed by the support belt and the front section. The structure combination of

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the support belt, the front section and the waist section can effectively control the extent of dropping of the scrotum and prevent the testes from being pressed by the upper ends of the legs.

This invention has the following advantages: because only a support belt is added to the front section of the man' s briefs and lining, its structure is very simple, since the dropping of the scrotum is restrained by the support belt, the performance of breathability, ventilation and temperature reducing in the environment of the upper ends of the legs is improved significantly, the process of putting on is very convenient since the support belt and the front section are connected together; moreover, the support belt has no special requirements on material since this invention is targeted toward the support function.

DESCRIPTIONS ABOUT ATTACHED DIAGRAMS

Figure 1 is the structure illustration of the triangular briefs and lining proposed according to this invention.

Figure 2 is the side view of the triangular briefs and lining according to this invention while being worn.

Figure 3 is the structure illustration of the rectangular briefs and lining proposed according to this invention.

Figure 4 is the side view of the rectangular briefs and lining according to this invention while being worn.

Figure 5 is the structure illustration of the second embodiment of this invention.

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Figure 6 is the structure illustration of the third embodiment of this invention.

Figure 7 is the structure illustration of the fourth embodiment of this invention.

Figure 8 is the structure illustration of the fifth embodiment of this invention.

Figure 9 is the structure illustration of the sixth embodiment of this invention.

5 Figure 10 is another structure illustration of the sixth embodiment of this invention.

THE OPTIMUM EMBODIMENTS

Embodiment 1

As shown in Figure 1 and 2, this invention comprises a waist section (1), a front
10 section (2), a back section (4), and a support belt (3), which is connected with the front section (2). The support belt (3) is a belt-like section connected with the front section (2). Both ends of the support belt (3) have flared shape and are diverged up, connected with the front section (2) and the waist section (1) of the front section so as to facilitate stability of the support belt (3). The bottom of the support
15 belt has an arc shape, and forms a bag together with the bottom portion of the front section (2) to facilitate supporting and holding function.

Because the support belt (3) in this invention needs stability of connection, different means of connection can be used according to different materials of the
briefs. In addition, the support belt should be adjusted according to various
20 requirements on the supporting force and supporting position.

For example, in the structure shown in this embodiment I, the front section (2) of

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the briefs is made of a kind of popular and soft knitted cloth. The support belt (3) is made of low elasticity material. The entire support belt (3) is fixed on the front section (2) and the waist section (1), and a bag section (21) is formed by elasticity of the material of the front section (2) surrounded by the arc section (31) of the bottom of the support belt (3). The bottom of the bag section (21), which is surrounded by the support belt (3), should be located between the bottom of the tightening position of the scrotum and the upper ends of the legs. With the above mentioned structure, when the briefs are worn, the bottom of the support belt is right between the bottom of the tightening position of the scrotum and the groins above the upper ends of the legs, thus forming an obstacle against dropping of the scrotum. While resisting dropping of the scrotum, the support belt together with the bag formed by the support belt and the front section also offer support and holding function for the scrotum.

With the above mentioned connection means, the support belt (3) can also be made of elastic materials, and a bag section (21) is formed by the bottom of the front section (2) and elasticity of the support belt (3) at the position connected with the front section (2) and the waist section (1) along the entire length of the support belt (3). Or, when the support belt (3) is connected with the front section (2) and the waist section (1) along the entire length of the support belt (3), an elastic belt (31) can be added on the support belt (3) between the front section (2) and the waist section (1).

The above mentioned connection means of fixing the entire length of the support belt (3) can be designed to be different specifications according to different bodies

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so as to meet various requirements.

Figure 2 is an illustration of the first embodiment of this invention while being worn. When it is worn, the tightening portion of the bottom of the support belt (3) is between the bottom of the tightening position of the scrotum and the groins above the upper ends of the legs. Therefore, it resists dropping of the scrotum. While resisting dropping of the scrotum, the support belt (3) together with the bag (2) formed by the support belt (3) and the front section (2) also hold the scrotum. Since the support belt (3) is adjustable, the structure of the support belt (3) can control the extent of dropping of the scrotum, and thus guarantee the testes against being pressed by the upper ends of the legs.

With the above mentioned description, since only a support belt (3) is added to the front section (2) of the man's briefs and lining, the structure of this invention is very simple and will not affect comfortableness while the briefs being worn. Meanwhile, since the structure of the support belt (3) can effectively restrain dropping of the scrotum, the performance of breathability, ventilation and temperature reducing in the environment of the upper ends of the legs is improved significantly. Since the support belt (3) and the front section (2) are connected together, the process of putting on is very convenient. Moreover, because this invention is targeted toward support function, the support belt has no special requirements on material.

Embodiment 2

The second embodiment of this invention is shown in Figure 5. In this

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embodiment, the support belt (3) is connected to the front section (2) and the waist section (1) only at three points, and the are section (31) at the bottom of it is fixed and connected to the extreme bottom of the bag section of the front section (2) so as to ensure stability of the bottom section (33) of the support belt (3). Its top flared mouth is connected to the waist section (1). In order to make the supporting position of the support belt (3) comfortable, the support belt (3) should be adjusted when the briefs are put on. A length adjustment device can be installed on the support belt (3), and the supporting position of the support belt (3) can be controlled by adjusting the length of the support belt. Various existing length adjustment methods can be utilized in the length adjustment device. For example, several hooks (32) are installed at either end of the support belt (3), and several holes (11) are made in the longitudinal direction of the waist section (1). The length of the support belt can be adjusted by hooking up the hook (32) at holes of different height so as to adjust the supporting force. In addition, other popular length adjustment devices such as taps, nylon tabs and buttons etc. can also be used in the length adjustment device of this invention. The support belt (3) can also be made of two segments, with several holes being made on one segment, while several hooks being installed on the corresponding segment.

In this embodiment, since the support belt (3) is connected to the front section (2) and the waist section (1) at three points, a positioning device is installed between the top and bottom connection points of the support belt (3) so as to stabilize the portion of the support belt (3) between the top and bottom connection points on the front section (2). The positioning device can be a whole (22) on the

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front section (2), allowing the support belt (3) to penetrate through the whole (22) and form a stable integration with the front section (2). The positioning device can also be a tab installed on the front section, and the width of the mouth of the tab is slightly greater than the width of the support belt (3) so as to allow the support belt
5 (3) to have a little position adjustment function in the transverse direction.

With the above-mentioned structure, this embodiment has good adjustment function. At the beginning of use, the user can make some pre-adjustments according to various requirements, and no further adjustments will be needed after it has been adjusted to be comfortable. The structure of this embodiment has
10 better adaptability and will better suit various needs of the users.

Embodiment 3

This embodiment is shown in Figure 6, which is basically the same as the embodiment 2. The support belt (3) is connected to the front section (2) and the
15 waist section (1) of the briefs at three points. What is different is: the are section (31) of the bottom of the support belt (3) is connected to the bottom of the bag section of the front section (2) via the tab device (21) so as to ensure stability of the bottom of the support belt (3), and the top flared mouth of the support belt (3) is connected to the waist section (I), and the support belt (3) should be adjusted while
20 putting on the briefs so as to make the supporting position of the support belt (3) comfortable. To adjust the width of the flared mouth at the top of the support belt (3) in this embodiment, several holes (II) can be made horizontally along the waist section (I), and several hooks (32) can be installed at the flared mouth end of the

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support belt (3). The width of the flared mouth can be adjusted by changing the hooking position of the hook (32). When the width of the mouth is great, the are section at the bottom of the support belt (3) will be lifted up, while when the width of mouth is small, the are section at the bottom of the support belt (3) will be lowered, and thus realize adjustments of high or low positions of the support belt (3). Buttons at different positions of the waist section or other fast connection structures can also be used to adjust the width of the mouth end.

Embodiment 4

In the fourth embodiment of this invention shown in Figure 7, the structure of this embodiment is identical to that of the embodiment 3. The width of the flared mouth at the top of the support belt (3) is adjusted by an auxiliary belt (33) fixed on the support belt (3). Pulling inward or loosening the support belt by the auxiliary belt can change the width of the mouth of the support belt (3).

Embodiment 5

As shown in Figure 8, in this embodiment, only the arc section (3 l) at the bottom of the support belt (3) is made of elastic materials such as elastic ribbons, etc. The arc section (3 l) can be connected to the bottom of the front section (2), or connected to the bottom of the front section (2) with its bottom. With the elasticity of the arc section (3l), a bag section (21) can be formed by tightening the are section (3l) at the bottom of the front section (2). Various elastic structures of the support belt (3) described before offer the capability to adjust the supporting force

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of the support belt (3), and thus control the extent of dropping of the scrotum.

The support belt (3) can also be connected tightly to the front section (2) and the waist section (1) with its top diverging section. Its bottom section is loosened, and a length adjustment device (5) is installed at a proper position of the loosened section. Existing various length adjustment devices are all suitable for this invention. The function of the length adjustment device (5) is to adjust the supporting force according to the user's special condition, so as to control the extent of dropping of the scrotum.

With the above description, this invention can fulfill various means of connections and adjustments, and its aim is to make users with different demands feel more comfortable while wearing this kind of man's briefs. Various connection methods and adjustment methods of the supporting force above mentioned are used to describe this invention only, and not limit this invention.

Embodiment 6

This embodiment is shown in Figure 9. The support belt (3) has an arc shape and is located between the two trousers legs at the bottom of the front section (2) and is fixed. It can be designed to be different specifications. The support belt (3) can also be fixed at the joint of slanted stitches of the front section (2), as shown in Figure 10, and this embodiment is designed based on a kind of popular triangular briefs.

In the above mentioned embodiment, if the front section (2) of the triangular briefs has double-layer structure (such double-layer structure is popular and is not

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shown in the figure), the support belt (3) can be penetrated through the mouth of the double-layer front section into the double-layer structure after its bottom is fixed, and then the above mentioned various connections, positioning and adjustment devices can be connected into the interlayer of the double-layer structure of the front section (2). This kind of structure can eliminate
5 uncomfortableness of the user due to thick front section while the support belt (3) functioning to support.

Embodiment 7

As shown in Figures 3 and 4, in this embodiment, the support belt (3) is
10 connected to the front section (2) and the waist section (1) of a kind of right-angled man's briefs and lining. A bag section (21) is formed by the support belt (3) and the portion of the front section (2) which is surrounded by it. The connection method is the same as that in the first embodiment and is not stated again. The support function of this embodiment is entirely identical to that of the above statement.

CLAIMS

1. A kind of man' s briefs and lining of the briefs, comprising a waist section, a front section and a back section, wherein a support belt is connected to the front section.
2. A kind of man' s briefs and lining of the briefs as described in Claim 1 , wherein a bag section is formed by the support belt and the front section.
3. A kind of man' s briefs and lining of the briefs as described in Claim I , wherein both ends of the support belt are flared up.
4. A kind of man' s briefs and lining of the briefs as described in claim I , wherein the bottom of the support belt has an arc shape.
5. A kind of man' s briefs and lining of the briefs as described in Claim 1 , wherein the length of the support belt is adjustable.
6. A kind of man' s briefs and lining of the briefs as described in Claims I or 3, where in the width of the flared mouth of the support belt is adjustable. .
7. A kind of man' s briefs and lining of the briefs as described in Claims 1 or 5, wherein the support belt has an elastic structure so as to adjust the supporting force.

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8. A kind of man' s briefs and lining of the briefs as described in Claims 1 or 5, wherein a length adjustment device is installed on the support belt so as to adjust the supporting force.

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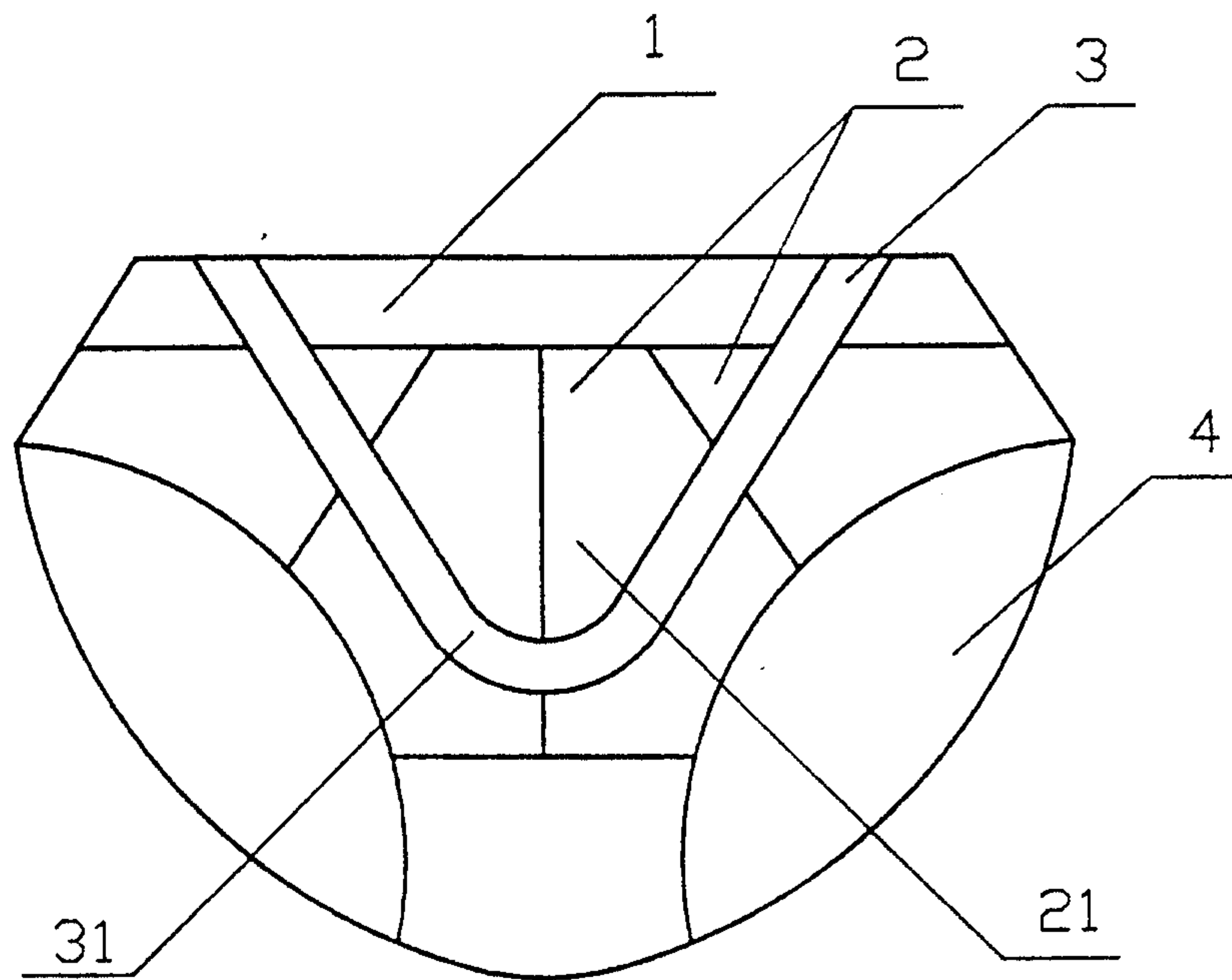


图 1

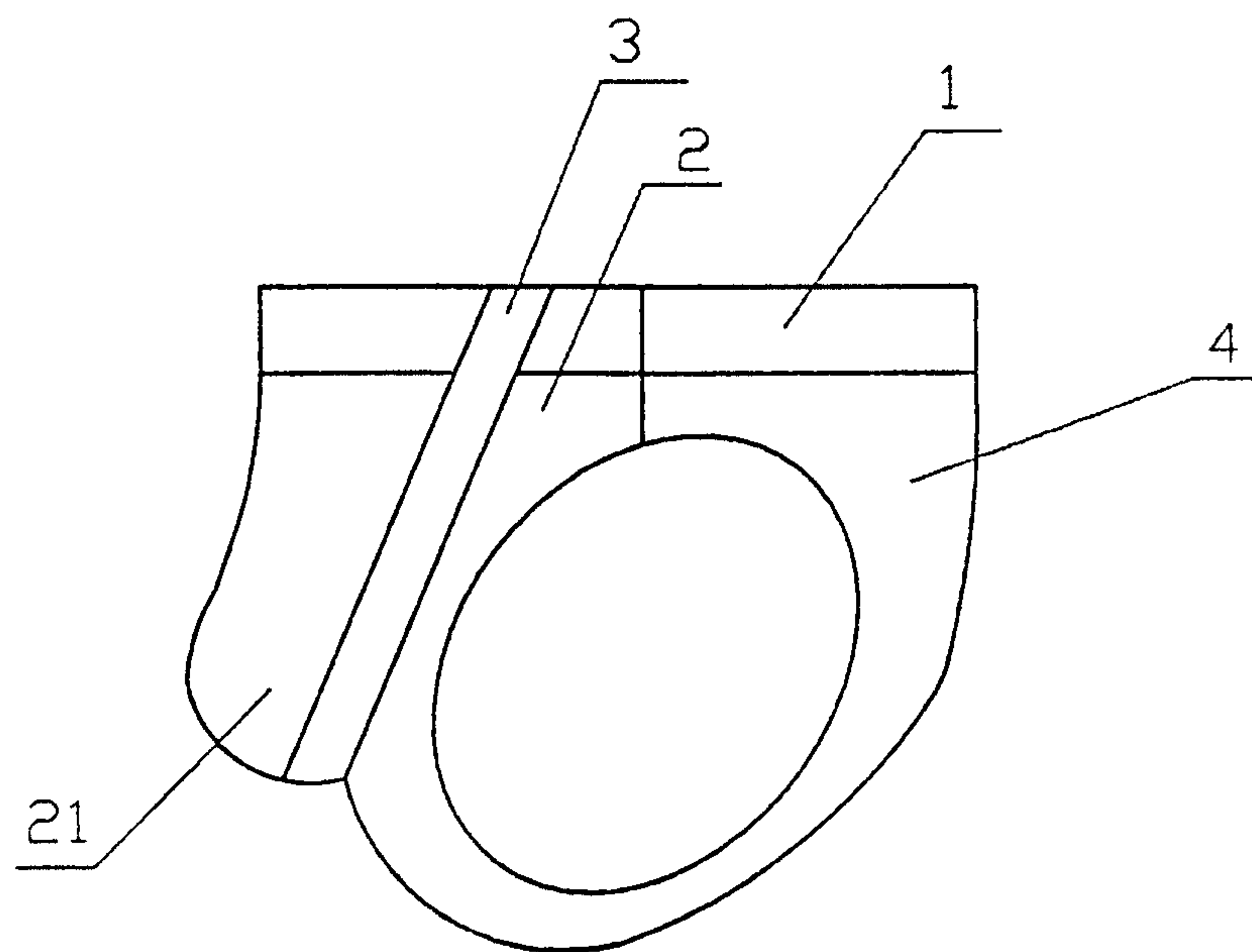


图 2

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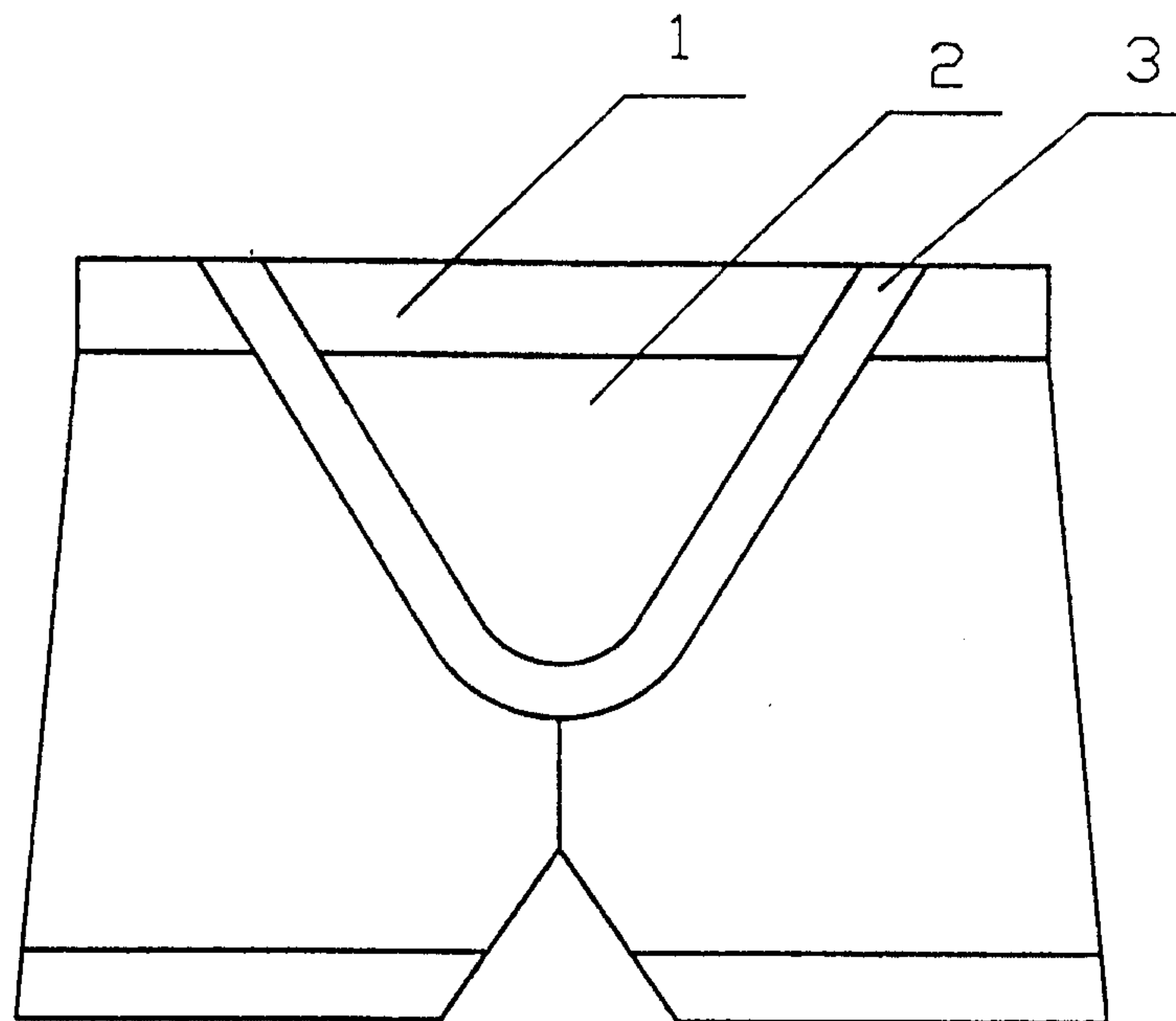


图 3

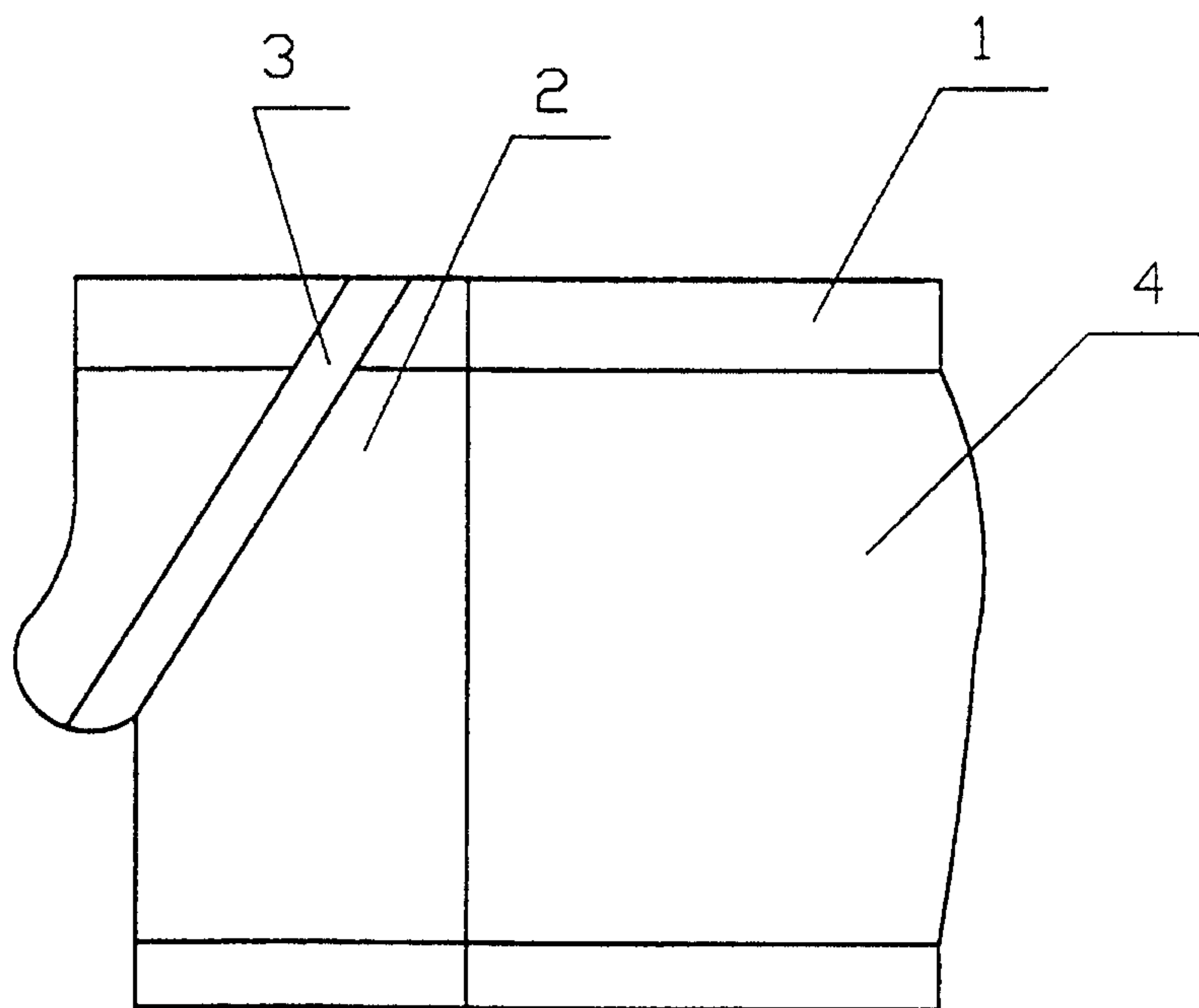


图 4

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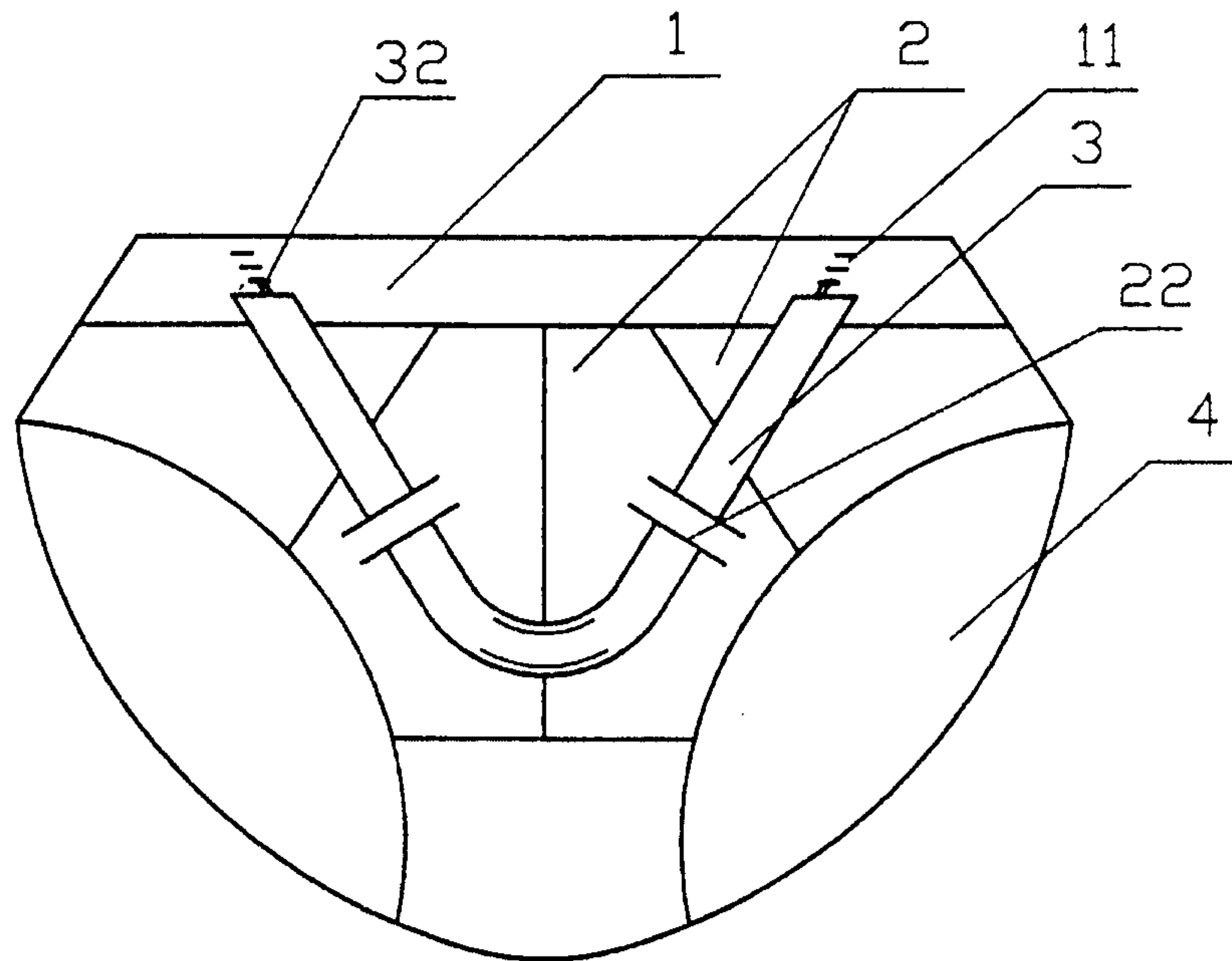


图 5

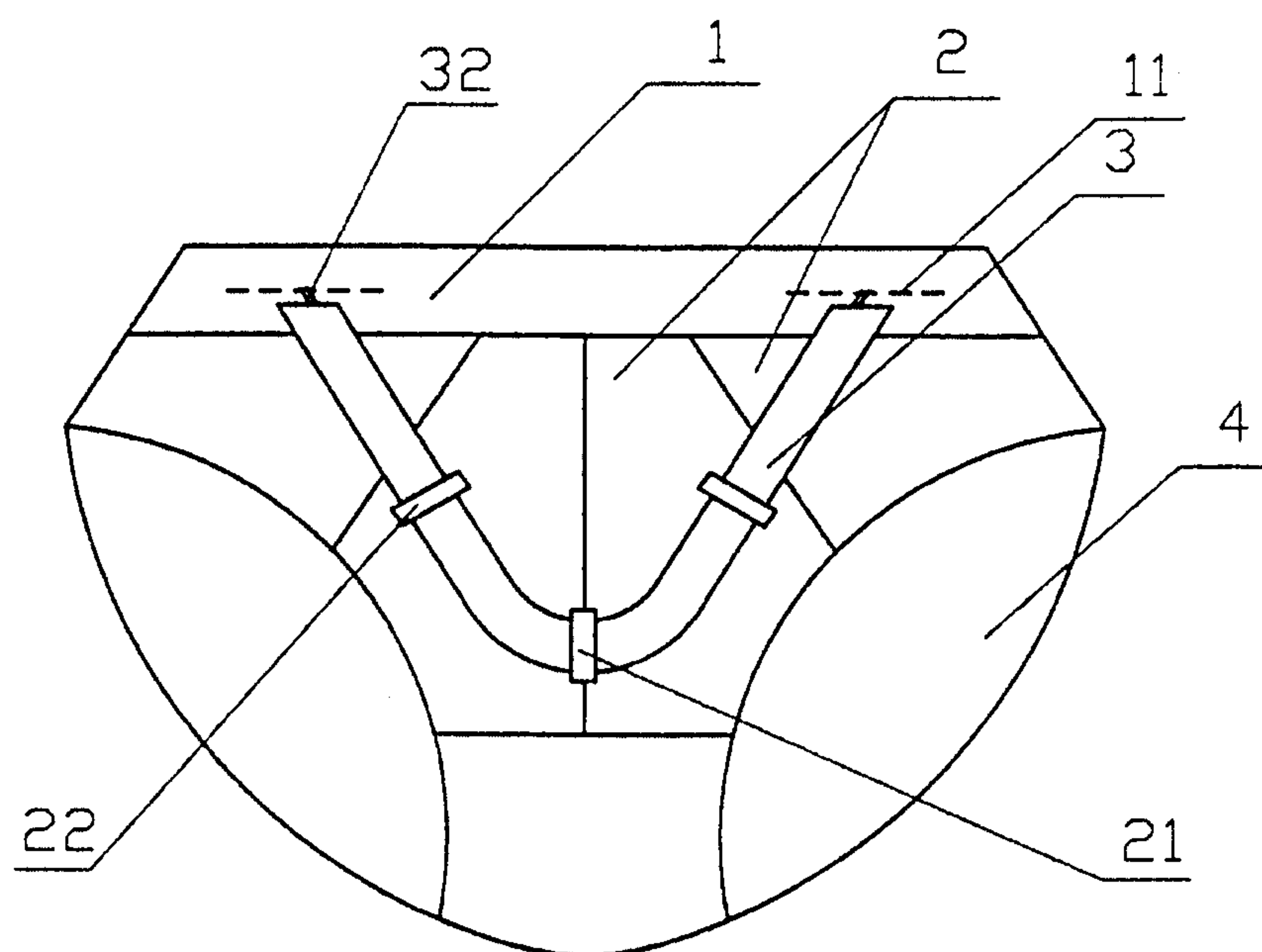


图 6

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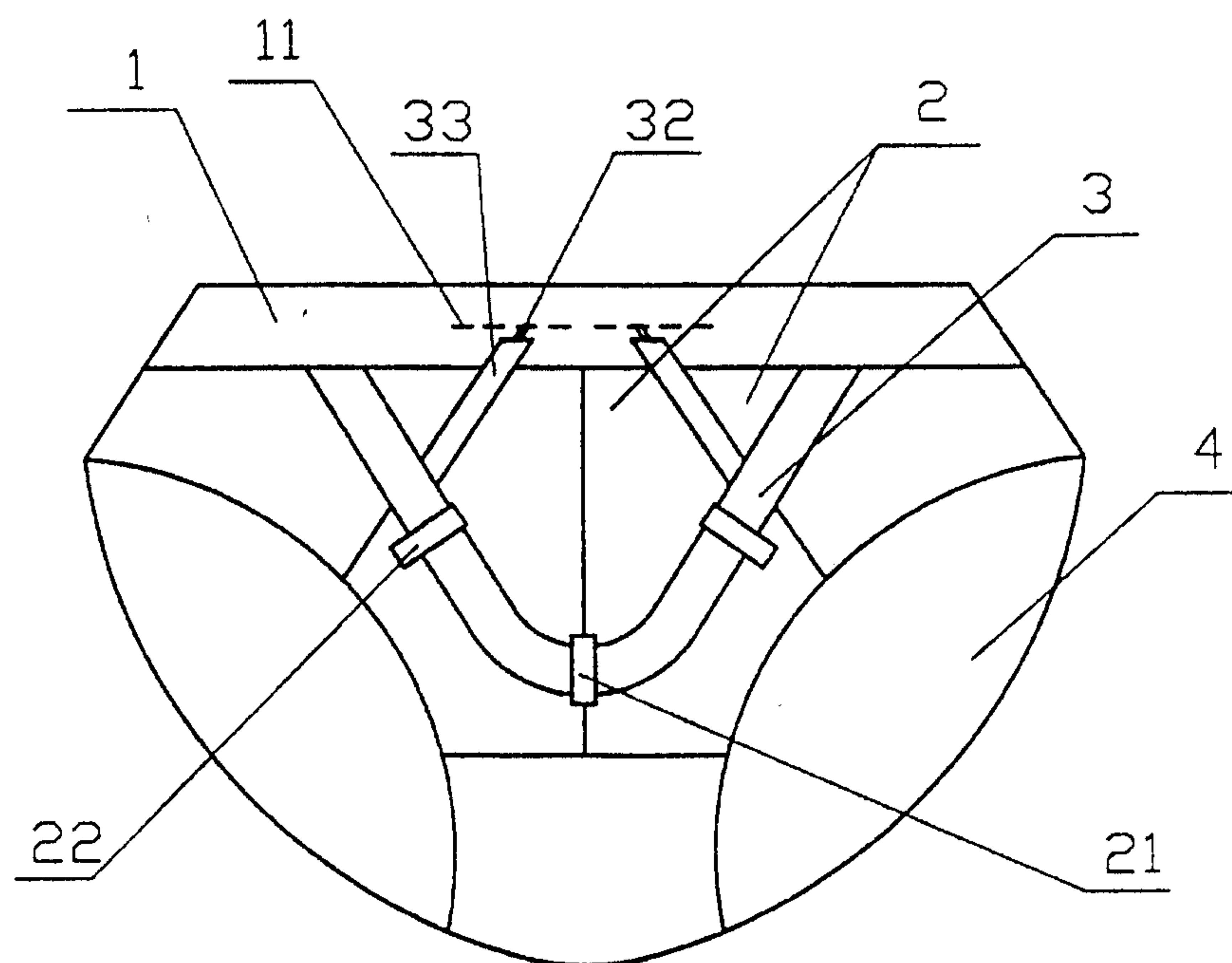


图 7

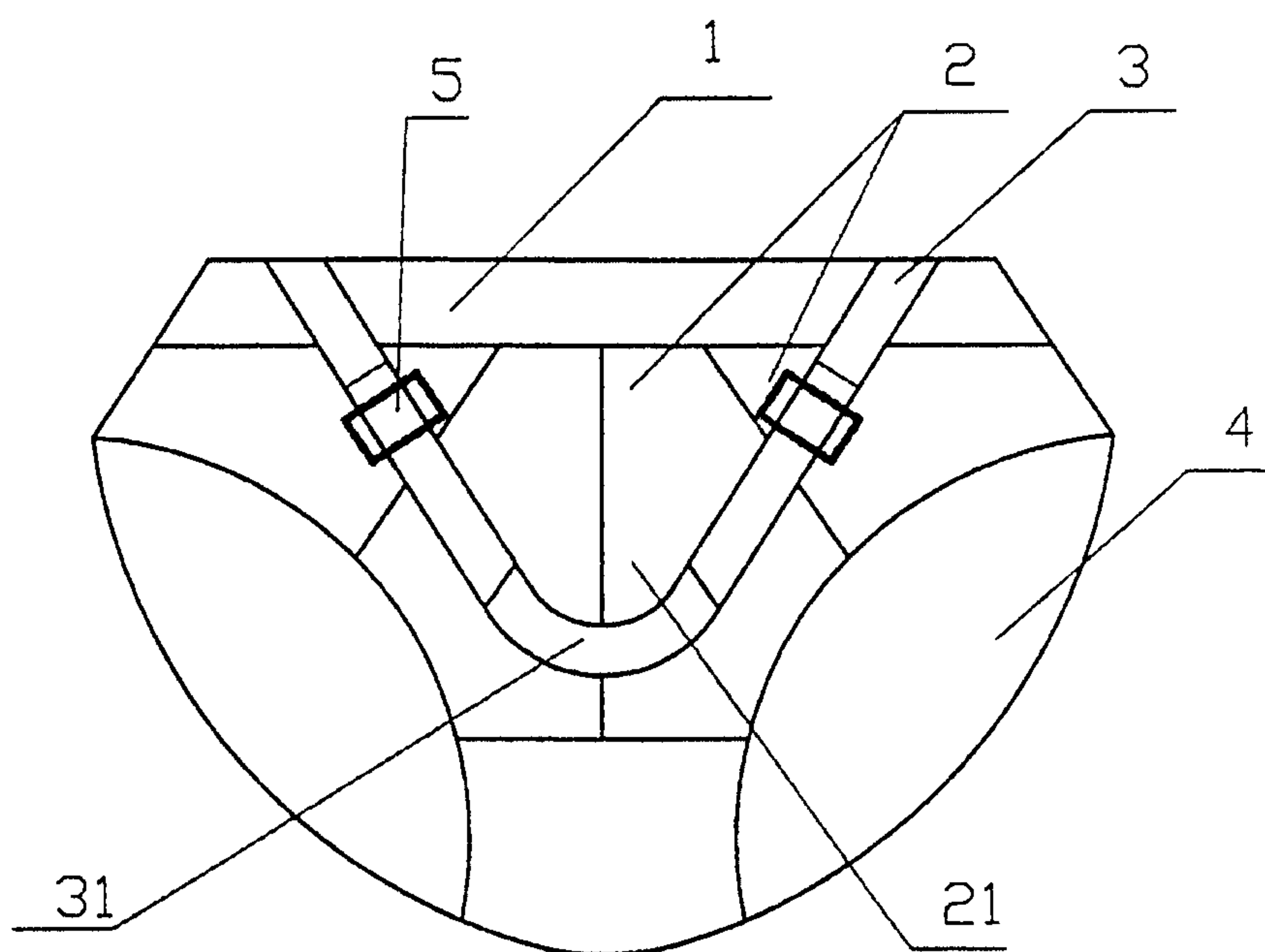


图 8

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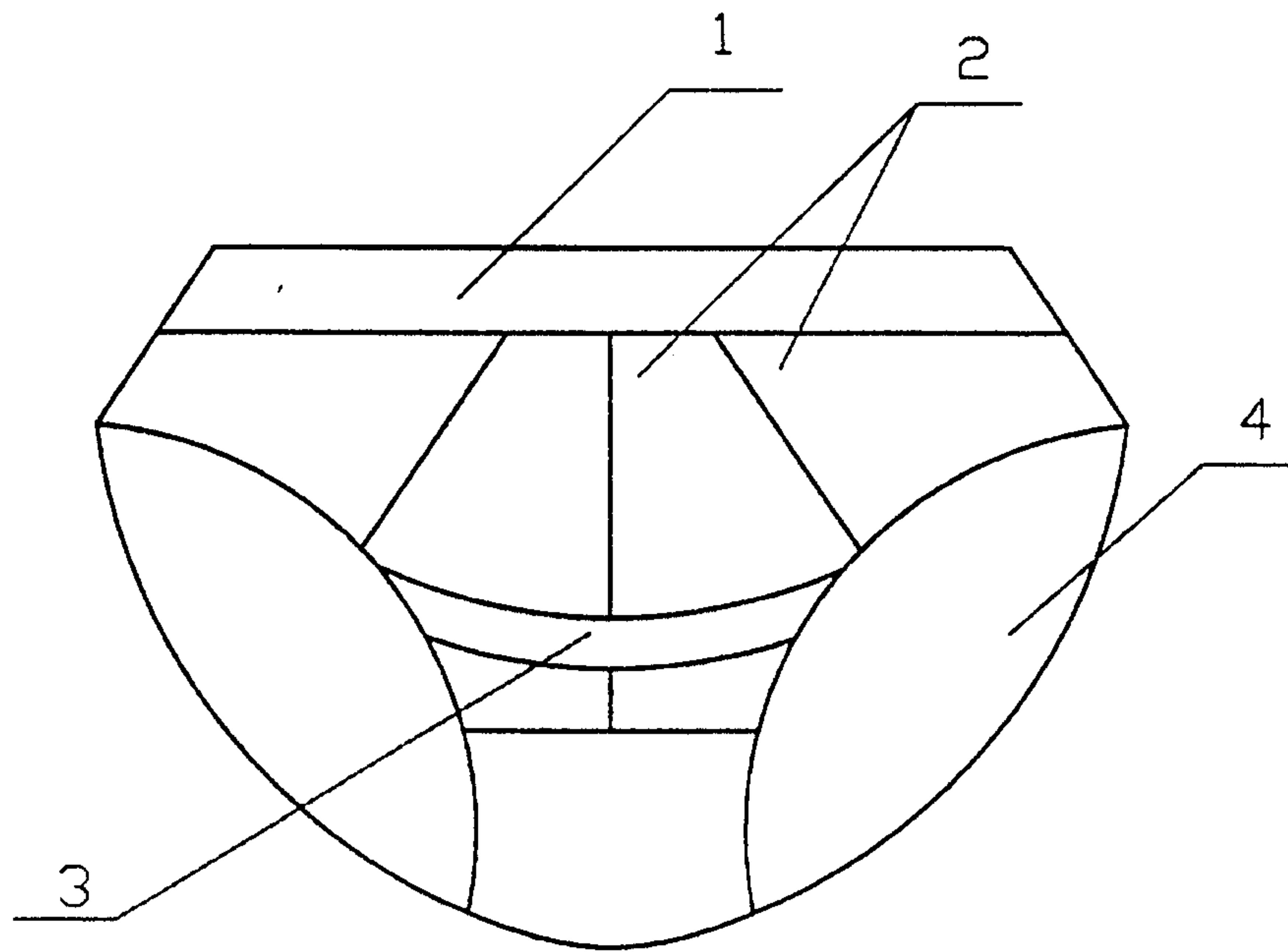


图 9

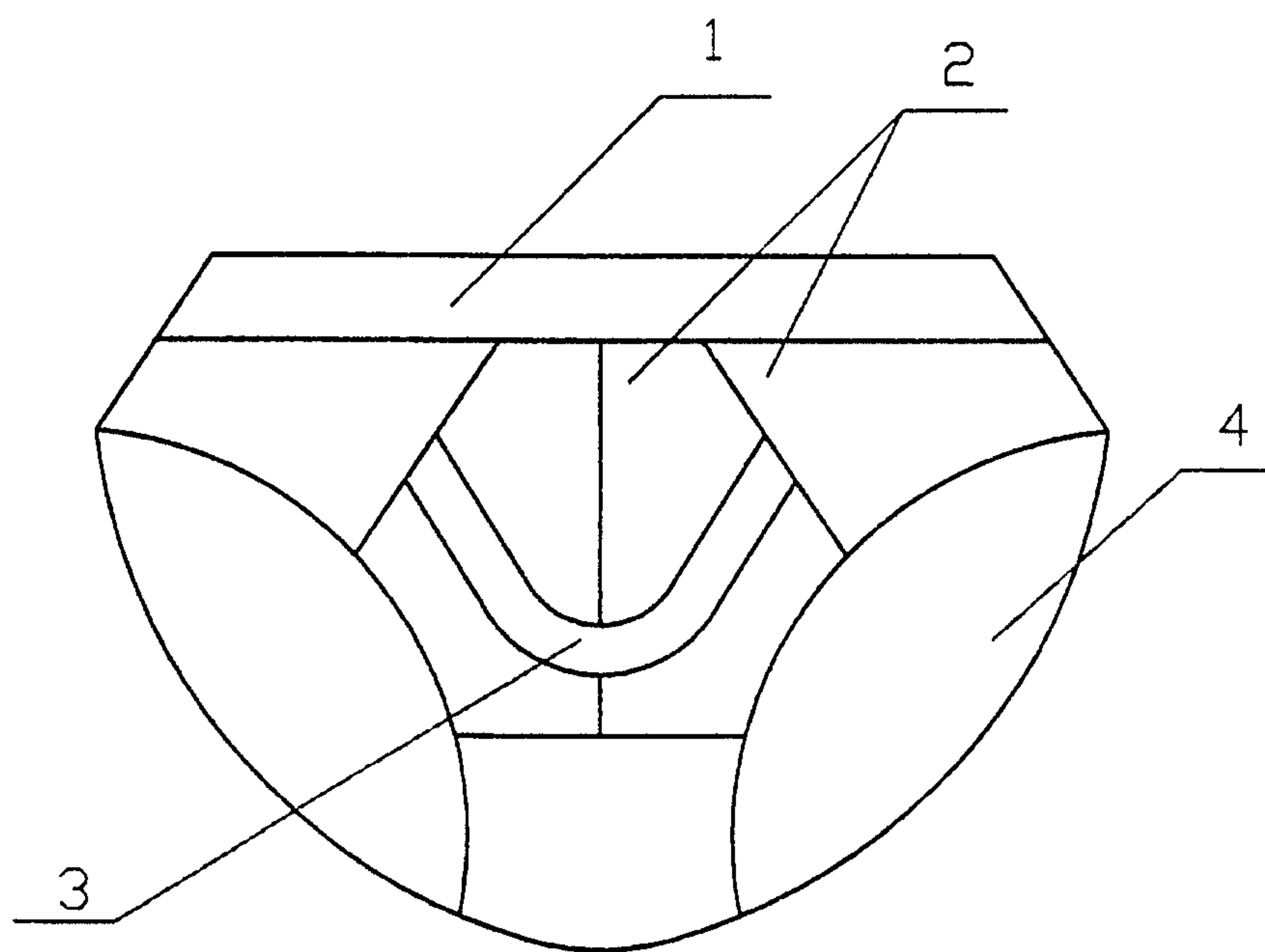


图 10

