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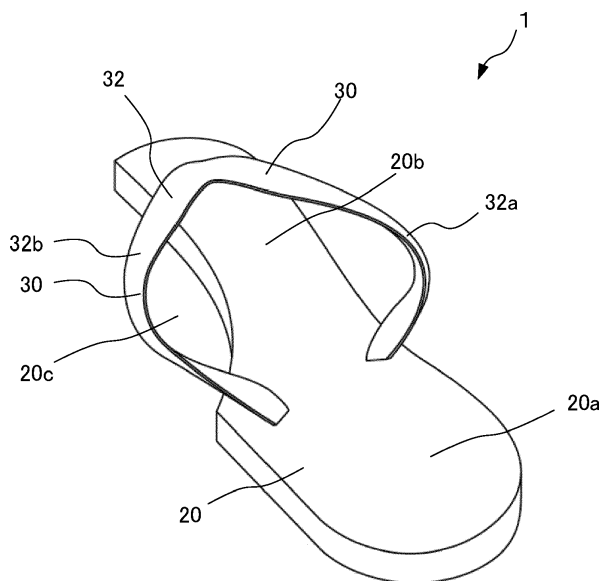
FOOTWEAR
- (57)

Problem to be solved

To provide footwear having features good for health

Means of solution

Footwear 1 having a strap 30 comprising a front strap portion 31 interposed between a big toe and an index toe, and a side strap portion 32 put on a top of foot, and a footbed 20 which the strap 30 is attached to and a foot is mounted on, wherein the footbed 20 has a removal portion 20c obtained by removing a site being closer to

the outside as seen from a front strap portion 31 while closer to toes as seen from a region which a heel of a user is mounted on, and wherein in a state wherein a user wears footwear 1, a removal portion 20c is opposed to a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user.
- Fig. 1
- 
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Description

Technical Field

[0001] The present invention relates to footwear such as zori and sandals, wherein an ankle and a portion lower thereto are left to be open.

Background Art

[0002] Open footwear such as zori and sandals, wherein an ankle and a portion lower thereto are left open, is typically configured by attaching a belt and a strap to a flat insole shaped like a foot sole. Additionally, so far, zori or sandals having features good for health, such as having their insoles provided with nubs to allow foot sole acupoints to be stimulated during walking and/or having the insoles inclined sideward to allow O-shaped legs or X-shaped legs to be corrected are widely used.

[0003] So far, this kind of techniques include a technique described in Patent Document 1. Patent Document 1 discloses an acupressure sandal wherein positions at which to place a front hole for a strap are set at two locations in a manner of an index toe being interposed between a big toe and three toes, middle, ring, little toes in a ratio of 1 to 3 with the index toe in the middle, and wherein further an insole part on which to put the index toe is made to protrude by 2~5mm.

Prior Art

Patent Document

[0004] Patent Document 1: JP3232282U

Summary of Invention

Problem to be solved by the Invention

[0005] By the way, in these years, a low-priced footwear such as beach sandals is desired to have features good for health. Especially, in hope of preventing O-shaped legs from drawing attention while, on a seaside or the like, swimming wear being had on, a beach sandal having features of correcting O-shaped legs is desired to come out.

[0006] The present invention is, for its purpose, to meet such a request to provide footwear having features good for health.

Means of solving the Problem

[0007] The present invention is provided with a configuration described below, in order to achieve said purpose.

(1) Footwear (e.g., footwear 1) having a strap (e.g., strap 30) comprising a front strap portion (e.g., front

strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 20) which the strap is attached to and a foot is mounted on,

wherein said footbed has a heel portion on which to mount a heel of a user, and a removal portion (e.g., a removal portion 20c) obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said heel portion, and wherein the removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user.

(2) Footwear (e.g., footwear 3) having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 20) which the strap is attached to and a foot is mounted on,

wherein said footbed has a heel portion on which to mount a heel of a user, and a thin portion (e.g., a removal portion 26a of a footbed 25) obtained by decreasing, in thickness, a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said heel portion, and wherein the thin portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, but is not opposed to a part lying closer to a big toe than said front strap portion does.

(3) Footwear according to (1), wherein said footbed has further a heel removal portion obtained by removing a heel part.

(4) Footwear according to (2)

wherein said footbed has a vertical two-layer structure, wherein an upper layer which is one layer of the two-layer structure is in a shape made by forming a foot circumference while providing no removal portion, and wherein a lower layer which is another layer of the two-layer structure has a heel portion on which to mount a heel of a user, and a removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said heel portion.

tion.

(5) Footwear according to (2),

wherein said footbed has a vertical two-layer structure, 5
 wherein a lower layer which is one layer of the two-layer structure is in a shape made by forming a foot circumference while providing no removal portion, and 10
 wherein an upper layer which is another layer of the two-layer structure has a heel portion on which to mount a heel of a user, and a removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said heel portion. 15

(6) Footwear according to (4) or (5),

wherein said footbed further has a heel removal portion obtained by removing a heel part. 20

According to (1)-(6), when a user walks with footwear according to the present invention on, an outside site closer to toes on a foot sole stays away from the ground, and therefore, weight of the user focuses on an inward side portion of a foot sole of the user. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. In this way, footwear having features good for health is allowed to be provided. 25 30

(7) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 40) which the strap is attached to and a foot is mounted on, 35

wherein said footbed has a recess portion (e.g., recess portion 40c) on its reverse surface, 40
 wherein the recess portion is opposed through a bottom portion of said recess portion to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and 45
 wherein said bottom portion has flexibility.

(8) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 50) which the strap is attached to and a foot is mounted on, 50 55

wherein said footbed has a vertical two-layer

structure,

wherein an upper layer (e.g., first layer 51) which is one layer of the two-layer structure has a first removal portion (e.g., removal portion 51a) obtained by removing a site opposed to a heel of a user, and a second removal portion (e.g., removal portion 51c) obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first removal portion,

wherein a lower layer (e.g., second layer 52) which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion,

wherein said second removal portion is opposed in the user to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, and wherein a level-difference part formed by an upper surface of said upper layer and an upper surface of said lower layer in said second removal portion is provided with a slant (e.g., slant 51d).

(9) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 60) which the strap is attached to and a foot is mounted on,

wherein said footbed has a vertical two-layer structure,

wherein an upper layer (e.g., first layer 61) which is one layer of the two-layer structure has a first removal portion (e.g., removal portion 61a) obtained by removing a site opposed to a heel of a user, and a second removal portion (e.g., removal portion 61c) obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first removal portion,

wherein a lower layer (e.g., second layer 62) which is another layer of said two-layer structure is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion,

wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and

wherein a level-difference part formed by an up-

per surface of said upper layer and an upper surface of said lower layer in said second removal portion, and an end portion closer to toes on a reverse surface of said footbed are provided with a slant (e.g., slant 61d, 61e).

(10) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 70) which the strap is attached to and a foot is mounted on,

wherein in said footbed, a region (e.g., removal portion 70c) opposed to a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user is more flexible than another region (e.g., flexible bed 71).

(11) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 80) which the strap is attached to and a foot is mounted on,

wherein said footbed has a first recess portion (e.g., heel recess portion 80a) opposed to a heel of a user and a second recess portion (e.g., outside recess portion 80c) opposed to a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first recess portion, wherein said second recess portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and

wherein a reverse surface of an end portion closer to toes of said footbed is provided with a slant (e.g., slant 80d) inclined to a big toe of the user.

(12) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 90) which the strap is attached to and a foot is mounted on,

wherein said footbed has a recess portion (e.g., recess portion 90a) on its reverse surface wherein the recess portion is opposed through a bottom portion of said recess portion to at least a big toe, an index toe and their base parts, of a user, and wherein said bottom portion has flexibility.

(13) Footwear having a footbed (e.g., footbed 100) which a foot is mounted on, a first belt-like member (e.g., big toe strap 33) which is attached to the footbed in an arch-like shape so that a big toe can be inserted thereto, and a second belt-like member (e.g., ankle strap 34) which is attached to the footbed, on a side closer to a heel as seen from said first belt-like member, in an arch-like shape so that a top of foot can be inserted thereto,

wherein said footbed has a vertical two-layer structure,

wherein an upper layer (e.g., first layer 101) which is one layer of the two-layer structure has a first removal portion (e.g., removal portion 101a) obtained by removing a site opposed to a heel of a user and a second removal portion (e.g., removal portion 101c) obtained by removing a site being closer to a little toe as seen from said first belt-like member while closer to toes as seen from said first removal portion

wherein a lower layer which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion, and

wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of the user.

(14) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 110) which the strap is attached to and a foot is mounted on,

wherein said footbed has a first recess portion (e.g., recess portion 110a) and a second recess portion (e.g., recess portion 110b) on its reverse surface,

wherein said first recess portion is opposed through a bottom portion of the first recess portion to a heel of a user,

wherein said second recess portion is opposed through a bottom portion of the second recess portion to a big toe, an index toe and their base parts, of the user, and

wherein bottom portions of said first recess portion and second recess portion have flexibility.

(15) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion

31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 120) which the strap is attached to and a foot is mounted on,

wherein said footbed has a gap portion (e.g., recess portion 121c) extending toward a big toe from a thickness-direction medial portion on a side surface closer to a little toe as seen from said front strap portion, and

wherein the gap portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user.

(16) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 130) which the strap is attached to and a foot is mounted on,

wherein said footbed has a vertical two-layer structure,

wherein an upper layer (e.g., first layer 131) which is one layer of the two-layer structure has a first block (e.g., first block 131a) on which said front strap portion is placed, and a second block (e.g., second block 131b) on which a termination portion of said side strap portion is placed,

wherein a lower layer (e.g., second layer 132) which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference,

wherein a first recess portion is formed between said first block and said second block while a second recess portion which a heel of a user is opposed to is formed closer to the heel as seen from said second block, and

wherein said first recess portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of the user.

(17) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 140) which the strap is attached to and a foot is mounted on,

wherein said footbed has a vertical two-layer

structure,

wherein an upper layer (e.g., first layer 141) which is one layer of the two-layer structure has a first removal portion (e.g., removal portion 141a) obtained by removing a site opposed to a heel of a user, and a second removal portion (e.g., removal portion 141c) obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first removal portion,

wherein a lower layer (e.g., second layer 142) which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion,

wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and

wherein an end portion closer to toes and an end portion closer to a heel, on a reverse surface of said footbed are provided with slants, respectively.

[0008] According to (7)-(11), (13), (15)-(17), when a user walks with footwear according to the present invention on, an outside site closer to toes (a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of the user) on a foot sole stays away from the ground, and therefore, weight of the user focuses on an inward side portion of a foot sole of the user. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. In this way, footwear having features good for health is allowed to be provided.

[0009] According to (12), (14), when a user walks with footwear according to the present invention on, an inside site closer to toes (a big toe, an index toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of the user) on a foot sole is opposed to a recess portion. This makes it easier, while a user is walking, for his/her big toe and middle toe, and their base parts to be inclined to an inward side portion. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. In this way, footwear having features good for health is allowed to be provided.

[0010] (18) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 150) which the

strap is attached to and a foot is mounted on, and wherein said footbed comprises a flat plate member and has a removal portion (e.g., removal portion 150a) obtained by removing a site opposed to a heel of a user.

[0011] (19) Footwear having a strap (e.g., strap 30) comprising a front strap portion (e.g., front strap portion 31) interposed between a big toe and an index toe, and a side strap portion (e.g., side strap portion 32) put on a top of foot, and a footbed (e.g., footbed 160) which the strap is attached to and a foot is mounted on,

wherein said footbed comprises a flat plate member and has a recess portion (e.g., removal portion 161a) on a site opposed to a heel of a user, and wherein an end portion closer to toes on a reverse surface of said footbed is provided with a slant (e.g., slants 161b, 162a).

[0012] According to (18), (19), a part below a heel is an empty space, and therefore, a user gets into a posture like walking on tiptoe and is allowed through walking with footwear to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks. In this way, footwear having features good for health is allowed to be provided.

[0013] According to (8), (9), (17), (19) in particular, either of an end portion closer to toes and an end portion closer to a heel on a reverse surface of a footbed is provided with a slant, and therefore, a slant on a reverse side of a toe portion abuts on the ground on an event of walking to allow a center of gravity to move smoothly on the event of walking so that a user can walk more easily.

[0014] According to (11) in particular, a reverse surface of an end portion closer to toes of a footbed is provided with a slant (e.g., slant 80d) inclined to a big toe of a user, which therefore, makes it easier for a big toe, a middle toe and their base parts, of the user, to be inclined to an inward side portion. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. Advantageous Effect of Invention

[0015] The present invention allows footwear having features good for health, to be provided.

Brief Description of Drawings

[0016]

[Fig.1] A perspective view showing an appearance of footwear 1 according to a first embodiment of the present invention

[Fig.2] A front view of Fig.1

[Fig.3] A perspective view showing an appearance of footwear 2 according to a modification of a first embodiment of the present invention

[Fig.4] A perspective view showing an appearance of footwear 3 according to a second embodiment of the present invention

[Fig.5] A front view of Fig.4

[Fig.6] A perspective view showing an appearance of footwear 3 according to a modification of a second embodiment of the present invention

[Fig.7A] A plan view showing an appearance of footwear 4 according to a third embodiment of the present invention

[Fig.7B] A plan view showing a reverse side of Fig.7A

[Fig.7C] A side view obtained by seeing Fig.7A from a side closer to a little toe

[Fig.8A] A plan view showing an appearance of footwear 5 according to a fourth embodiment of the present invention

[Fig.8B] A plan view showing a reverse side of Fig.8A

[Fig.8C] A side view obtained by seeing Fig.8A from a side closer to a little toe

[Fig.8D] A front view of Fig.8A

[Fig.9A] A plan view showing an appearance of footwear 6 according to a fifth embodiment of the present invention

[Fig.9B] A plan view showing a reverse side of Fig.9A

[Fig.9C] A side view obtained by seeing Fig.9A from a side closer to a little toe

[Fig.9D] A front view of Fig.9A

[Fig.10A] A plan view showing an appearance of footwear 7 according to a sixth embodiment of the present invention

[Fig.10B] A plan view showing a reverse side of Fig.10A

[Fig.10C] A side view obtained by seeing Fig.10A from a side closer to a little toe

[Fig.11A] A plan view showing an appearance of footwear 8 according to a seventh embodiment of the present invention

[Fig.11B] A plan view showing a reverse side of Fig.11A

[Fig.11C] A side view obtained by seeing Fig.11A from a side closer to a little toe

[Fig.11D] A front view of Fig.11A

[Fig.12A] A plan view showing an appearance of footwear 9 according to an eighth embodiment of the present invention

[Fig.12B] A plan view showing a reverse side of Fig.12A

[Fig.12C] A side view obtained by seeing Fig.12A from a side closer to a little toe

[Fig.12D] A front view of Fig.12A

[Fig.13A] A plan view showing an appearance of footwear 10 according to a ninth embodiment of the present invention

[Fig.13B] A plan view showing a reverse side of Fig.13A

[Fig.13C] A side view obtained by seeing Fig.13A from a side closer to a little toe

[Fig.13D] A front view of Fig.13A

[Fig.14A] A plan view showing an appearance of footwear 11 according to a tenth embodiment of the present invention

[Fig.14B] A plan view showing a reverse side of

Fig.14A

[Fig.14C] A side view obtained by seeing Fig.14A from a side closer to a little toe

[Fig.14D] A front view of Fig.14A

[Fig.15A] A plan view showing an appearance of footwear 12 according to a 11th embodiment of the present invention

[Fig.15B] A plan view showing a reverse side of Fig.15A

[Fig.15C] A side view obtained by seeing Fig.15A from a side closer to a little toe

[Fig.16A] A plan view showing an appearance of footwear 13 according to a 12th embodiment of the present invention

[Fig.16B] A plan view showing a reverse side of Fig.16A

[Fig.16C] A side view obtained by seeing Fig.16A from a side closer to a little toe

[Fig.16D] A front view of Fig.16A

[Fig.17A] A plan view showing an appearance of footwear 14 according to a 13th embodiment of the present invention

[Fig.17B] A plan view showing a reverse side of Fig.17A

[Fig.17C] A side view obtained by seeing Fig.17A from a side closer to a little toe

[Fig.17D] A front view of Fig.17A

[Fig.18A] A plan view showing an appearance of footwear 15 according to a 14th embodiment of the present invention

[Fig.18B] A plan view showing a reverse side of Fig.18A

[Fig.18C] A side view obtained by seeing Fig.18A from a side closer to a little toe

[Fig.19A] A plan view showing an appearance of footwear 16 according to a 15th embodiment of the present invention

[Fig.19B] A plan view showing a reverse side of Fig.19A

[Fig.19C] A side view obtained by seeing Fig.19A from a side closer to a little toe

[Fig.19D] A front view of Fig.19A

Embodiments of Invention

[0017] As follows, embodiments according to the present invention are described in detail with reference to the drawings.

[First Embodiment]

[0018] Fig.1 is a perspective view showing an appearance of footwear 1 according to a first embodiment of the present invention. Fig.2 is a front view of Fig.1. The footwear 1 is a so-called beach sandal, and has a footbed 20 and a strap 30.

[0019] Fig.1 and Fig.2 show a footwear 1 to wear on a left foot of a user, and since a footwear 1 to wear on a

right foot thereof is bilaterally symmetrical with the footwear 1 to wear on a left foot, detail description is left out for the footwear 1 to wear on a right foot.

[0020] A footbed 20 is made of rubber material, EVA urethane material, or the like, is a flat plate member made by forming a foot circumference, and has a heel portion 20a which a heel of a user is mounted on and a toe portion 20b which toes of the user are mounted on.

[0021] A strap 30 is made of fabric or synthetic resin and composed of a front strap portion 31 and a side strap portion 32. The front strap portion 31 is a part extending upward from a plate surface of a footbed 20, and interposed between a big toe of a user and an index toe thereof, and is placed on a toe portion 20b of the footbed 20. The side strap portion 32 is composed of a string-like or belt-like member made of fabric or synthetic resin and is divided into an inside strap portion 32a having the front strap portion 31 as its proximal end and extending to a side portion (referred to as inward side portion) closer to a big toe on the footbed 20 and an outside strap portion 32b extending to a side portion (referred to as outward side portion) closer to a little toe thereon. A termination portion of the inside strap portion 32a and that of the outside strap portion 32b are fixed to each of both side portions of a foot arch region of the footbed 20.

[0022] A footbed 20 further has a removal portion 20c on a side closer to a little toe as seen from a front strap portion 31. The removal portion 20c is formed by making a notch in a longitudinal direction of the footbed 20 from an end portion closer to toes on the footbed 20, passing it through a site somewhat closer to a little toe as seen from the front strap portion 31, and passing it through a site somewhat closer to toes as seen from a termination portion of an outside strap portion 32b, to make a gentle arc-form cut as far as to an outward side portion of the footbed 20.

[0023] As follows, a state wherein a user wears footwear 1 is described.

[0024] Footwear 1 configured in this way can be put on by a user letting in his/her foot through a strap 30 and interposing a front strap portion 31 between a big toe of the user and an index toe thereof. On this occasion, an inside strap portion 32a passes by a big toe base of a user while an outside strap portion 32b passes by a top of foot of the user, and thereby, the footwear 1 is made to be less likely to slip off a foot of the user.

[0025] In a state wherein a user wears footwear 1, a removal portion 20c is opposed to at least a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user. That is, in the case where a foot sole is divided into two, a toe-side and a heel-side parts near an arch of foot and where the toe-side part is further divided into a big-toe-side (inside) and a little-toe-side (outside) parts, a toe-side outside moiety is at large opposed to the removal portion 20c.

[0026] Since this makes, in the case where a user

walks with footwear 1, an outside moiety closer to toes on a foot sole stay away from the ground, weight of the user focuses on an inward side portion of a foot sole of the user. Additionally, the user comes to be careful while standing upright or walking that outside part of the foot sole which a removal portion 20c is opposed to does not touch the ground. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer.

[0027] In this embodiment, which is configured in this way, wearing by a user makes weight of the user focus on an inward side portion of a foot sole, which therefore, allows a center of gravity of a leg of the user to be adjusted inward and allows a gap between knees of the user to be closer. This allows the user to walk, even in the case where he/she has changed into swimwear, at a beach without worrying about his/her O-shaped legs. Further, in this embodiment, in the case where a speel plaster is attached to a corn which has occurred on a foot-sole outside, a site to which the speel plaster is attached is allowed, by footwear 1 being had on, to stay away from the ground, and therefore, an advantageous effect of making the speel plaster be less likely to be displaced or detached on the occasion of walking is also expected.

[A modification of a first embodiment]

[0028] Fig.3 is a perspective view showing an appearance of footwear 2 according to a modification of a first embodiment of the present invention. The footwear 2 according to a modification of a first embodiment is one wherein a removal portion 20d obtained by removing a heel part is formed additionally in a footbed 20 of footwear 1 according to a first embodiment shown in Fig.1. The removal portion 20d can be referred to as a heel removal portion.

[0029] In a modification of a first embodiment, which is configured in this way, footwear 2 has a removal portion 20d and thereby, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 2 to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks. Additionally, the footwear 2 has a removal portion 20c and thereby, allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer, as described above.

[0030] Fig.4 is a perspective view showing an appearance of footwear 3 according to a second embodiment of the present invention. Fig.5 is a front view of Fig.4. A member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0031] Footwear 3 has a footbed 25 and a strap 30. The footwear 3 is different from footwear 1 according to a first embodiment since it has a footbed 25 in place of

a footbed 20 of a first embodiment.

[0032] A footbed 25 is structured in two layers of a first layer 26 and a second layer 27. The first layer 26 has a removal portion 26a. Additionally, although the first layer 26 is obtained by chamfering a toe edge portion of a footbed 20 of footwear 1 according to a first embodiment, it remains, otherwise, to be in an identical shape or in a one different in thickness, and the removal portion 26a is formed on the same site as a removal portion 20c of the footbed 20 of footwear 1.

[0033] A second layer 27 is in a shape made by forming a foot circumference while having no removal portion 26a formed in a first layer 26. A footbed 25 is made by adhering a lower surface of the first layer 26 and an upper surface of the second layer 27 to each other, and a level difference is caused on a removal portion 26a site.

[0034] Footwear 3 is achieved by attaching a strap 30 to an footbed 25, like footwear 1 according to a first embodiment.

[0035] When a user wears footwear 3, an outside part closer to toes on a foot sole of the user stays away, to the extent of a level difference caused by a removal portion 26a, from and is opposed to an upper surface of a second layer 27.

[0036] Thus, in footwear 3 according to a second embodiment, a user focuses weight of the user on an inward side portion of his/her foot sole, in the case where the user stands upright with the footwear 3 on, as in footwear 1 according to a first embodiment. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. Additionally, since a bottom side of a removal portion 26a is covered with a second layer 27, beach sand is kept from directly touching a foot sole in the case where the footwear 3 is used on a sand beach.

[A modification of a second embodiment]

[0037] Footwear 3 according to a second embodiment may have, for its footbed 25, a first layer 26 and a second layer 27 made to vertically change over with each other to make the second layer 27 an upper layer and the first layer 26 a lower layer.

[0038] Even a modification of a second embodiment, which is configured in this way, has such an effect as footwear 3 according to a second embodiment does.

[0039] Additionally, footwear 3 according to a second embodiment as well may have, in its footbed 25, a heel site removed, as footwear 2 according to a modification of a first embodiment. Thereby, a user gets into a posture like walking on tiptoe and is allowed to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks. Additionally, an example shown in Fig.3 has its heel site removed in an arc shape but may have it removed linearly as shown in Fig.6.

[0040] Additionally, it may be also structured in two-layers by adhering, to a lower surface of footwear whose

heel site has been removed in an arc shape as shown in Fig.3 or linearly in Fig.6, a second layer 27 of footwear 3 according to a second embodiment. This keeps beach sand from directly touching a foot sole.

[0041] In a second embodiment and its modification, a footbed 25 is formed in two layers, but it may be formed in one layer (as a single plate) if it is obtained by forming, on a site which in the footbed, is opposed to an outside part of a foot sole of a user, a thin portion obtained by decreasing the plate in thickness.

[Third Embodiment]

[0042] Fig.7A is a plan view showing an appearance of footwear 4 according to a third embodiment of the present invention. Fig.7B is a plan view showing a reverse side of Fig.7A. Fig.7C is a side view obtained by seeing Fig.7A from a side closer to a little toe. The footwear 4 is a so-called beach sandal, and has a footbed 40 and a strap 30. Fig.7A shows a footwear 4 to wear on a left foot of a user, and since a footwear 4 to wear on a right foot thereof is bilaterally symmetrical with the footwear 4 to wear on a left foot, detail description is left out for the footwear 4 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0043] A footbed 40 is made of rubber material, EVA urethane material, or the like, is a flat plate member made by forming a foot circumference, and has a heel portion 40a which a heel of a user is mounted on and a toe portion 40b which toes of the user are mounted on.

[0044] A front strap portion 31 of a strap 30 is a part extending upward from a plate surface of a footbed 40, and interposed between a big toe of a user and an index toe thereof, and is placed on a toe portion 40b of the footbed 40. A side strap portion 32 is divided into an inside strap portion 32a having the front strap portion 31 as its proximal end and extending to a side portion (referred to as inward side portion) closer to a big toe on the footbed 40 and an outside strap portion 32b extending to a side portion (referred to as outward side portion) closer to a little toe thereon. A termination portion of the inside strap portion 32a and that of the outside strap portion 32b are fixed to each of both side portions of a foot arch region of the footbed 40.

[0045] A footbed 40 has, on its reverse side, further a recess portion 40c on a side closer to a little toe as seen from a front strap portion 31, as shown in Fig.7B and Fig.7C. A wall surface of a recess portion 40c goes in a longitudinal direction of the footbed 40 from an end portion closer to toes on the footbed 40, passes through a site somewhat closer to a little toe as seen from the front strap portion 31, and passes through a site somewhat closer to toes as seen from a termination portion of an outside strap portion 32b, to extend in a form of a gentle arc as far as to an outward side portion of the footbed

40. The recess portion 40c is opened on its periphery portion.

In other words, footwear 4 according to a third embodiment is configured by making, in footwear 1 according to a first embodiment shown in Fig.1, a plate-like extension be present from an upper portion of a removal portion 20c to an outward side portion and have the extension cover the upper portion of a removal portion 20c. Since the recess portion 40c is small in thickness on its bottom portion, it has flexibility in its vertical direction.

[0046] In a state wherein a user wears footwear 4, a removal portion 40c is opposed to at least a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user. That is, in the case where a foot sole is divided into two, a toe-side and a heel-side parts near an arch of foot and where the toe-side part is further divided into a big-toe-side (inside) and a little-toe-side (outside) parts, a toe-side outside moiety is at large opposed to the recess portion 40c through a bottom portion of the recess portion 40c.

[0047] In the case where a user walks with footwear 4, a reverse surface of an outside moiety closer to toes on a foot sole, that is, a bottom surface of a recess portion 40c, stays away from the ground. This makes it harder to walk steadily. The user comes to focus weight on an inward side portion of his/her foot sole, in order to maintain walking balance. Additionally, the user comes to be careful while standing upright or walking that the bottom surface of a recess portion 40c does not touch the ground. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer.

[0048] In a third embodiment configured in this way, such an advantageous effect as in a first embodiment can be expected, and further, a foot sole can be prevented, when footwear 4 is used, from getting less clean and from treading directly on protruding objects.

[Fourth Embodiment]

[0049] Fig.8A is a plan view showing an appearance of footwear 5 according to a fourth embodiment of the present invention. Fig.8B is a plan view showing a reverse side of Fig.8A. Fig.8C is a side view obtained by seeing Fig.8A from a side closer to a little toe. Fig.8D is a front view of Fig.8A. The footwear 5 is a so-called beach sandal, and has a footbed 50 and a strap 30. Fig.8A shows a footwear 5 to wear on a left foot of a user, and since a footwear 5 to wear on a right foot thereof is bilaterally symmetrical with the footwear 5 to wear on a left foot, detail description is left out for the footwear 5 to wear on a right foot.

[0050] Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto

for a symbol to be allocated, and has its detail description left out.

[0051] Footwear 5 is different from footwear 1 according to a first embodiment since it has a footbed 50 in place of a footbed 20 of a first embodiment.

[0052] A footbed 50 is made of rubber material, EVA urethane material, or the like, and is structured in two layers of a first layer 51 and a second layer 52, as shown in Figs.8C, 8D. The first layer 51 has a removal portion 51a obtained by removing a part corresponding to a heel of a user, a toe portion 51b which toes of the user are mounted on, and a removal portion 51c obtained by removing parts corresponding to a middle toe, a ring toe, a little toe, and their base parts, of the user, as well as vicinity thereof. Additionally, a slant 51d which is inclined downward is formed on a fringe portion of the removal portion 51c in the first layer 51, as shown in Figs.8A, 8D.

[0053] A removal portion 51c is formed by making a notch in a longitudinal direction of a footbed 50 from an end portion closer to toes on a first layer 51, passing it through a site somewhat closer to a little toe as seen from a front strap portion 31, and passing it through a site somewhat closer to toes as seen from a termination portion of an outside strap portion 32b, to make a gentle arc-form cut as far as to an outward side portion of a footbed 40.

[0054] A second layer 52 is in a shape made by forming a foot circumference, as shown in Fig.8B, while having neither removal portion 51a nor 51c formed in a first layer 51. A footbed 50 is made by adhering a lower surface of the first layer 51 and an upper surface of the second layer 52 to each other, and a level difference by an upper surface of the first layer 51 and an upper surface of the second layer 52 is caused on removal portion 51a, 51c sites. A slant 51d is formed on this level-difference part. The second layer 52 is made of more flexible material than the first layer 51 is.

[0055] Footwear 5 is achieved by attaching a strap 30 to an footbed 50, like footwear 1 according to a first embodiment.

[0056] When a user wears footwear 5, a heel part on a foot sole of the user is opposed to a removal portion 51a, and a removal portion 51c is opposed to a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user. A heel part and an outside part closer to toes, on a foot sole of the user stay away, to the extent of level differences caused by removal portions 51a, 51c, from and are opposed to an upper surface of a second layer 52.

[0057] Footwear 5 according to a fourth embodiment configured in this way exhibits the same advantageous effect as footwear 1 according to a first embodiment does. Further, it has a removal portion 51a and thereby, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 5 to be concomitantly trained for muscular strength from calves, through back

thighs, to buttocks. Additionally, a slant 51d which is inclined downward to an upper surface of a second layer 52 is formed on a fringe portion of a removal portion 51c. Thereby, on the occasion that impulse is applied to the user in a horizontal direction, for example, in the case of bumping into a person, a foot sole of the user abuts on the slant 51d. This makes it easier for the user to balance him/herself. Furthermore, since a second layer 52 is made of highly flexible material, the second layer 52 is elastically deformed to a great extent, in the case where a foot sole gets into contact with the second layer 52. Since this makes the user less balanced, he/she, in order to keep balanced, comes to focus weight on an inward side portion of his/her foot sole. Additionally, since at least a second layer 52 is interposed between the ground and a foot sole, the foot sole can be prevented, when footwear 5 is used, from getting less clean and from treading directly on protruding objects.

[Fifth Embodiment]

[0058] Fig.9A is a plan view showing an appearance of footwear 6 according to a fifth embodiment of the present invention. Fig.9B is a plan view showing a reverse side of Fig.9A. Fig.9C is a side view obtained by seeing Fig.9A from a side closer to a little toe. Fig.9D is a front view of Fig.9A. The footwear 6 is a so-called beach sandal, and has a footbed 60 and a strap 30. Fig.9A shows a footwear 6 to wear on a left foot of a user, and since a footwear 6 to wear on a right foot thereof is bilaterally symmetrical with the footwear 6 to wear on a left foot, detail description is left out for the footwear 6 to wear on a right foot.

[0059] Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0060] Footwear 6 is different from footwear 1 according to a first embodiment since it has a footbed 60 in place of a footbed 20 of a first embodiment.

[0061] A footbed 60 is structured in two layers of a first layer 61 and a second layer 62, as shown in Fig.9C and Fig.9D. The first layer 61 has a removal portion 61a obtained by removing a part corresponding to a heel of a user, a toe portion 61b which toes of the user are mounted on, and a removal portion 61c obtained by removing parts corresponding to a middle toe, a ring toe, a little toe, and their base parts, of the user, as well as vicinity thereof. A slant 61d which is inclined downward is formed on a fringe portion of the removal portion 61c in the first layer 61. Additionally, a slant 61e which is inclined upward to toes is formed on a reverse side of a toe portion on the first layer 61.

[0062] A second layer 62 is in a shape made by forming a foot circumference while having neither a removal portion 61a nor 61c formed in a first layer 61, as shown in Fig 9B. The second layer 62 is as rigid as the first layer

61. A slant 62a which is inclined upward to toes is formed on a reverse side of a toe portion on the second layer 62. The footbed 60 is made by adhering a lower surface of the first layer 61 and an upper surface of the second layer 62 to each other. This causes a level difference by an upper surface of the first layer 61 and an upper surface of the second layer 62, on removal portion 61a, 61c sites. A slant 61d is formed on this level-difference part. Additionally, by a slant 61e site of the first layer 61 and a slant 62a site of the second layer 62 being superposed on each other, a slant which is inclined upward to toes is formed on a reverse side of a toe portion on the footbed 60.

[0063] Footwear 6 is achieved by attaching a strap 30 to an footbed 60, like footwear 1 according to a first embodiment.

[0064] When a user wears footwear 6, a heel part and an outside part closer to toes, on a foot sole of the user stay away, to the extent of level differences caused by removal portions 61a, 61c, from and are opposed to an upper surface of a second layer 62. In other words, footwear 6 according to a fifth embodiment of the present invention is configured by forming, in footwear 5 according to a fourth embodiment, a slant which is inclined upward to toes on a reverse side of a toe portion while making a first layer 51 and a second layer 52 identical members or members similar in hardness.

[0065] Footwear 6 according to a fifth embodiment configured in this way exhibits the same advantageous effect as footwear 5 according to a fourth embodiment does. Further, since a slant is formed on a reverse side of a toe portion, a slant on the reverse side of a toe portion abuts on the ground on an event of walking to allow a center of gravity to move smoothly on the event of walking so that a user can walk more easily.

[Sixth Embodiment]

[0066] Fig.10A is a plan view showing an appearance of footwear 7 according to a sixth embodiment of the present invention. Fig.10B is a plan view showing a reverse side of Fig.10A. Fig.10C is a side view obtained by seeing Fig.10A from a side closer to a little toe. The footwear 7 is a so-called beach sandal, and has a footbed 70, a flexible bed 71, and a strap 30. Fig.10A shows a footwear 7 to wear on a left foot of a user, and since a footwear 7 to wear on a right foot thereof is bilaterally symmetrical with the footwear 7 to wear on a left foot, detail description is left out for the footwear 7 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0067] A footbed 70 is made of rubber material, EVA urethane material, or the like, is a flat plate member made by forming a foot circumference, and has a heel portion 70a which a heel of a user is mounted on and a toe portion

70b which toes of the user are mounted on.

[0068] A footbed 70 further has a removal portion 70c on a side closer to a little toe as seen from a front strap portion 31, as shown in Fig.10B. A removal portion 70c is formed by making a notch in a longitudinal direction of a footbed 70 from an end portion closer to toes on the footbed 70, passing it through a site somewhat closer to a little toe as seen from a front strap portion 31, and passing it through a site somewhat closer to toes as seen from a termination portion of an outside strap portion 32b, to make a gentle arc-form cut as far as to an outward side portion of the footbed 70.

[0069] A flexible bed 71 is made of a flexible member more flexible than a footbed 70, and is placed on and fixed to a removal portion 70c of the footbed 70. By the flexible bed 71 being fixed to the footbed 70, one foot-form plate member is made. By the flexible bed 71 being placed on the removal portion 70c of a footbed 70, a foot-form plate member is made.

[0070] Further, a flexible bed 71 is fixed to a removal portion 70c of a footbed 70, a strap 30 is attached to the footbed 70 in the same manner as to a footbed 20 of footwear 1 according to a first embodiment, and thereby, footwear 7 is configured.

[0071] When a user wears footwear 7, a flexible bed 71 is opposed to a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user, on a foot sole of the user.

[0072] In a sixth embodiment configured in this way, a flexible bed 71 is greatly depressed when an outside moiety closer to toes on a foot sole treads on the flexible bed 71, in the case where a user wears footwear 7 and walks. This makes it harder to walk steadily. The user comes to focus weight on an inward side portion of his/her foot sole, in order to maintain walking balance. Additionally, the user comes to be careful while standing upright or walking that he/she does not tread on the flexible bed 71. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. Further, since the flexible bed 71 is fixed to a removal portion 70c, the foot sole can be prevented, when footwear 7 is used, from getting less clean and from treading directly on protruding objects.

[Seventh Embodiment]

[0073] Fig.11A is a plan view showing an appearance of footwear 8 according to a seventh embodiment of the present invention. Fig.11B is a plan view showing a reverse side of Fig.11A. Fig.11C is a side view obtained by seeing Fig.11A from a side closer to a little toe. Fig.11D is a front view of Fig.11A. The footwear 8 is a so-called beach sandal, and has a footbed 80 and a strap 30. Fig.11A shows a footwear 8 to wear on a left foot of a user, and since a footwear 8 to wear on a right foot thereof

is bilaterally symmetrical with the footwear 8 to wear on a left foot, detail description is left out for the footwear 8 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig. 1,

[0074] Fig. 2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0075] A footbed 80 is made of rubber material, EVA urethane material, or the like, is a flat plate member made by forming a foot circumference, and has a heel recess portion 80a which a heel of a user is opposed to, a toe portion 80b which toes of the user are mounted on, an outside recess portion 80c which a middle toe, a ring toe, a little toe and their base parts, of a user are opposed to, and a slant 80d formed, as shown in Figs. 11B-11D, on a reverse-surface front end portion.

[0076] A strap portion 30 is fixed to a toe portion 80b. A heel recess portion 80a, an outside recess portion 80c, and a slant 80d, of a footbed 80 are formed by cutting and processing one sheet of plate-like member.

[0077] As bottom surfaces of a heel recess portion 80a and an outside recess portion 80c are lower than an upper surface of a toe portion 80b, level-difference parts are formed between the upper surface of a toe portion 80b and the bottom surfaces of a heel recess portion 80a and an outside recess portion 80c. As shown in Fig. 11A, a wall surface of a heel recess portion 80a is formed in a form of an arc extended toward toes and the heel recess portion 80a is opened on its periphery portion. A wall surface of an outside recess portion 80c goes in a longitudinal direction of a footbed 80 from an end portion closer to toes on the footbed 80, passes through a site somewhat closer to a little toe as seen from a front strap portion 31, and passes through a site somewhat closer to toes as seen from a termination portion of an outside strap portion 32b, to extend in a form of a gentle arc as far as to an outward side portion of the footbed 80. The outside recess portion 80c is opened on its periphery portion. Additionally, as shown in Figs. 11B-11D, a slant 80d is gently inclined from around a border between a toe portion 80b and an outside recess portion 80c to a part closer to a big toe of a user.

[0078] In a state wherein a user wears footwear 8, an outside recess portion 80c is opposed to a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user. That is, in the case where a foot sole is divided into two, a toe-side and a heel-side parts near an arch of foot and where the toe-side part is further divided into a big-toe-side (inside) and a little-toe-side (outside) parts, a toe-side outside moiety is at large opposed to the outside recess portion 80c. Additionally, a heel of a user is opposed to a heel recess portion 80a.

[0079] In the case where a user walks with footwear 8, a reverse surface of an outside moiety closer to toes on a foot sole, that is, a bottom surface of an outside

recess portion 80c, stays away from the ground. This makes it harder to walk steadily. The user comes to focus weight on an inward side portion of his/her foot sole, in order to maintain walking balance. Additionally, the user comes to be careful while standing upright or walking that the bottom surface of an outside recess portion 80c does not touch the ground. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. Further, since a heel recess portion 80a is provided, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 8 to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks. Additionally, since a slant 80d is formed, it is made easier, while a user is walking, for his/her big toe to be inclined inward, and therefore, a center of gravity of a leg of the user is allowed to be adjusted inward.

[0080] In a seventh embodiment configured in this way, such an advantageous effect as in a first embodiment can be expected, and further, a foot sole can be prevented, when footwear 8 is used, from getting less clean and from treading directly on protruding objects. Although a footbed 80 of the footwear 8 is made of one sheet of plate-like member, it may be structured in two layers as in footwear 6 according to a fifth embodiment to form a level difference.

[Eighth Embodiment]

[0081] Fig. 12A is a plan view showing an appearance of footwear 9 according to an eighth embodiment of the present invention. Fig. 12B is a plan view showing a reverse side of Fig. 12A. Fig. 12C is a side view obtained by seeing Fig. 12A from a side closer to a little toe. Fig. 12D is a front view of Fig. 12A. The footwear 9 is a so-called beach sandal, and has a footbed 90 and a strap 30. Fig. 12A shows a footwear 9 to wear on a left foot of a user, and since a footwear 9 to wear on a right foot thereof is bilaterally symmetrical with the footwear 9 to wear on a left foot, detail description is left out for the footwear 9 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig. 1, Fig. 2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0082] A footbed 90 is made of rubber material, EVA urethane material, or the like, is a flat plate member made by forming a foot circumference, and has, on its reverse surface, a recess portion 90a, as shown in Figs. 12B-12D, on a site opposite to a region opposed to a big toe, a middle toe, and their base parts, of a user.

[0083] A strap 30 is fixed to a footbed 90 at a position similar to that in footwear 1 according to a first embodiment shown in Fig. 1. A recess portion 90a of the footbed 90 is formed by cutting and processing one sheet of plate-like member. An end portion of a front strap portion 31 is fixed to a region in which the recess portion 90a is

formed.

[0084] As shown in Fig.12B, a wall surface of a recess portion 90a goes in a longitudinal direction of a footbed 90 from an end portion closer to toes on the footbed 90, passes through a site somewhat closer to a little toe as seen from a front strap portion 31, and passes through a site somewhat closer to toes as seen from a termination portion of an inside strap portion 32a, to extend in a form of a gentle arc as far as to an inward side portion of the footbed 90. As shown in Figs.12C, 12D, the recess portion 90a is opened on its periphery portion. Since the recess portion 90a is smaller in thickness on its bottom portion, it has flexibility.

[0085] In a state wherein a user wears footwear 9, a big toe, an index toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user is opposed to a recess portion 90a through a bottom portion of the recess portion 90a. Since the recess portion 90a is smaller in thickness on its bottom portion, it has flexibility.

[0086] In the case where a user wears footwear 9 configured in this way and walks, a reverse surface of an inside moiety closer to toes on a foot sole, that is, a bottom surface of a recess portion 90a, stays away from the ground. Since a bottom portion on which the recess portion 90a is formed is smaller in thickness, it is more flexible than other sites. This makes it easier, while a user is walking, for his/her big toe and middle toe, and their base parts, to be inclined to an inward side portion. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer.

[Ninth Embodiment]

[0087] Fig.13A is a plan view showing an appearance of footwear 10 according to a ninth embodiment of the present invention. Fig.13B is a plan view showing a reverse side of Fig.13A. Fig.13C is a side view obtained by seeing Fig.13A from a side closer to a little toe. Fig.13D is a front view of Fig.13A. The footwear 10 is a so-called beach sandal, and has a footbed 100 and a big-toe strap 33, and an ankle strap 34. Fig.13A shows a footwear 10 to wear on a left foot of a user, and since a footwear 10 to wear on a right foot thereof is bilaterally symmetrical with the footwear 10 to wear on a left foot, detail description is left out for the footwear 10 to wear on a right foot.

[0088] A footbed 100 is made of rubber material, EVA urethane material, or the like, and is structured in two layers of a first layer 101 and a second layer 102. The first layer 101 has a removal portion 101a obtained by removing a part corresponding to a heel of a user, a toe portion 101b which toes of the user are mounted on, and a removal portion 101c obtained by removing parts corresponding to a middle toe, a ring toe, a little toe, and their base parts, of the user.

[0089] A second layer 102 is in a shape made by forming a foot circumference while having neither a removal

portion 101a nor 101c formed in a first layer 101, as shown in Fig 13B. A footbed 100 is made by adhering a lower surface of the first layer 101 and an upper surface of the second layer 102 to each other, and a level difference by an upper surface of the first layer 101 and an upper surface of the second layer 102 is caused on removal portion 101a, 101c sites. The second layer 102 is made of more flexible material than the first layer 101 is. The footbed 100 is obtained through integration by superimposing the first layer 101 on the second layer 102 and fixing it thereon by adhesion or the like.

[0090] A big-toe strap 33 is made of a belt-like member as shown in Fig.13C, Fig.13D and attached to a site at which a big toe of a user is positioned, in an arch-like shape, on a toe portion 101b of a first layer 101. An ankle strap 34 is made of a belt-like member and has both of its end portions attached to both end portions closer to a heel, of the toe portion 101b of a first layer 101. This makes the ankle strap 34 be attached to the footbed 100 in a manner like drawing an arch.

[0091] A user can wear footwear 10 by letting in a top of foot through an ankle strap 34 and letting in a big-toe through a big-toe strap 33. Here, the ankle strap 34 is placed so as to surround an ankle. When a user wears footwear 10, a heel part on a foot sole of the user stays away, to the extent of a level difference caused by a removal portion 101a, from and is opposed to an upper surface of a second layer 102. Additionally, a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user stay away, to the extent of a level difference caused by the removal portion 101c, from and to an upper surface of the second layer 102.

[0092] Footwear 10 according to a ninth embodiment configured in this way exhibits the same advantageous effect as footwear 1 according to a first embodiment does. Further, it has a removal portion 101a and thereby, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 5 to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks. Furthermore, since a second layer 102 is made of highly flexible material, the second layer 102 is elastically deformed to a great extent, in the case where a foot sole gets into contact with the second layer 102. Since this makes the user less balanced, he/she, in order to keep balanced, comes to focus weight on an inward side portion of his/her foot sole. Additionally, since at least a second layer 102 is interposed between the ground and a foot sole, the foot sole can be prevented, when footwear 10 is used, from getting less clean and from treading directly on protruding objects.

[0093] With regard to footwear 10 shown in Fig.13A, a middle toe, a ring toe, a little toe and their base parts, of a user are opposed to an upper surface of a second layer 102 on a removal portion 101c, but they may include an index toe and its base part.

[Tenth Embodiment]

[0094] Fig.14A is a plan view showing an appearance of footwear 11 according to a tenth embodiment of the present invention. Fig.14B is a plan view showing a reverse side of Fig.14A. Fig.14C is a side view obtained by seeing Fig.14A from a side closer to a little toe. Fig.14D is a front view of Fig.14A. The footwear 11 is a so-called beach sandal, and has a footbed 110 and a strap 30. Fig.14A shows a footwear 11 to wear on a left foot of a user, and since a footwear 11 to wear on a right foot thereof is bilaterally symmetrical with the footwear 11 to wear on a left foot, detail description is left out for the footwear 11 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0095] A footbed 110 is made of rubber material, EVA urethane material, or the like, is a flat plate member made by forming a foot circumference, and has, on its reverse surface, a recess portion 110a on a site opposite to a heel of a user. Additionally, it has, on its reverse side, a recess portion 110b on a site opposite to a region opposed to a big toe, middle toe and their base parts, of the user.

[0096] A strap 30 is fixed to a footbed 110 at a position similar to that in footwear 1 according to a first embodiment shown in Fig.1. Recess portions 110a, 110b of the footbed 110 are formed by cutting and processing one sheet of plate-like member. An end portion of a front strap portion 31 is fixed to a region in which the recess portion 110b is formed.

[0097] As shown in Figs.14B-14D, a wall surface of a recess portion 110b goes in a longitudinal direction of a footbed 110 from an end portion closer to toes on the footbed 110, passes through a site somewhat closer to a little toe as seen from a front strap portion 31, and turns at a right angle near a point corresponding to an acupoint called "yongquan" on a foot sole, to extend in a form of L as far as to an inward side portion of the footbed 110. The recess portion 110a and the recess portion 110b are opened on their periphery portions.

[0098] In a state wherein a user wears footwear 11, a heel of a user is opposed to a recess portion 110a through a bottom portion of the recess portion 110a. Additionally, a big toe, an index toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user is opposed to a recess portion 110b through a bottom portion of the recess portion 110b. Since the recess portion 110b is smaller in thickness on its bottom portion, it has flexibility.

[0099] In the case where a user wears footwear 11 configured in this way and walks, a reverse surface of an inside moiety closer to toes on a foot sole, that is, a bottom surface of a recess portion 110b, stays away from the ground. Then, since a bottom portion on which the recess portion 110b is formed is smaller in thickness, it is flexible.

This makes it easier, while a user is walking, for his/her big toe and middle toe, and their base parts, to be inclined inward. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer. Further, since a recess portion 110a is provided, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 11 to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks.

[11th Embodiment]

[0100] Fig.15A is a plan view showing an appearance of footwear 12 according to a 11th embodiment of the present invention. Fig.15B is a plan view showing a reverse side of Fig.15A. Fig.15C is a side view obtained by seeing Fig.15A from a side closer to a little toe. The footwear 12 is a so-called beach sandal, and has a footbed 120 and a strap 30. Fig.15A shows a footwear 12 to wear on a left foot of a user, and since a footwear 12 to wear on a right foot thereof is bilaterally symmetrical with the footwear 12 to wear on a left foot, detail description is left out for the footwear 12 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0101] A footbed 120 is made of rubber material, EVA urethane material, or the like, and is structured in two layers of a first layer 121 and a second layer 122. The first layer 121 has a heel portion 121a which a heel of a user is mounted on, and a toe portion 121b which toes of the user are mounted on, as shown in Figs.15B, 15C. The first layer 121 further has, on its reverse surface, a recess portion 121c on a side closer to a little toe as seen from a front strap portion 31. A wall surface of a recess portion 121c goes in a longitudinal direction of the first layer 121 from an end portion closer to toes on the first layer 121, passes through a site somewhat closer to a little toe as seen from the front strap portion 31, and passes through a site somewhat closer to toes as seen from a termination portion of an outside strap portion 32b, to extend in a form of a gentle arc as far as to an outward side portion of the first layer 121. The recess portion 121c is opened on its periphery portion.

[0102] A second layer 122 is a flat plate member made by forming a foot circumference. A footbed 120 is obtained through integration by superimposing a first layer 121 on the second layer 122 and fixing it thereon by adhesion or the like. This makes a lower portion of a recess portion 121c be covered with an upper surface of the second layer 122. In other words, the footbed 120 has, by the first layer 121 having a recess portion 121c, a gap formed between the first layer 121 and the second layer 122.

[0103] A strap 30 is fixed, on a footbed 120, at a position similar to that in footwear 1 according to a first embodi-

ment shown in Fig.1.

[0104] In a state wherein a user wears footwear 12, a recess portion 121c is opposed to a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user. That is, in the case where a foot sole is divided into two, a toe-side and a heel-side parts near an arch of foot and where the toe-side part is further divided into a big-toe-side (inside) and a little-toe-side (outside) parts, a toe-side outside moiety is at large opposed to the recess portion 121c.

[0105] In the case where a user walks with footwear 12, a reverse surface of an outside moiety closer to toes on a foot sole, that is, a bottom surface of a recess portion 121c, stays away from an upper surface of a second layer 122. This makes an upper portion of the recess portion 121c of a first layer 121 be smaller in thickness to be deflected upward and downward, which therefore, makes it harder to walk steadily. The user comes to focus weight on an inward side portion of his/her foot sole, in order to maintain walking balance. Additionally, the user comes to be careful while standing upright or walking that the bottom surface of a recess portion 121c does not touch the upper surface of a second layer 122. This allows a center of gravity of a leg of the user to be adjusted inward and allows, if the user has his/her legs O-shaped, a gap between knees of the user to be closer.

[0106] In an 11th embodiment configured in this way, such an advantageous effect as in a first embodiment can be expected, and further, a foot sole can be prevented, when footwear 12 is used, from getting less clean and from treading directly on protruding objects. Although a footbed 120 of the footwear 12 is structured in two layers, it may be structured in three layers to form a removal portion in a middle layer and be thereby provided with a recess portion 121c on an outward side portion of the footbed 120. Alternatively, it may be provided with the recess portion 121c on the outward side portion of the footbed 120, by forming a notch through cutting and processing a center portion in a thickness direction of one sheet of plate which is considerably thick.

[12th Embodiment]

[0107] Fig.16A is a plan view showing an appearance of footwear 13 according to a 12th embodiment of the present invention. Fig.16B is a plan view showing a reverse side of Fig.16A. Fig.16D is a front view of Fig.16A. The footwear 13 is a so-called beach sandal, and has a footbed 130 and a strap 30. Fig.16A shows a footwear 13 to wear on a left foot of a user, and since a footwear 13 to wear on a right foot thereof is bilaterally symmetrical with the footwear 13 to wear on a left foot, detail description is left out for the footwear 13 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be

allocated, and has its detail description left out.

[0108] Footwear 13 is different from footwear 1 according to a first embodiment since it has a footbed 130 in place of a footbed 20 of a first embodiment.

[0109] A footbed 130 is made of rubber material, EVA urethane material, or the like, and is structured in two layers of a first layer 131 and a second layer 132. The first layer 131 is composed of a first block 131a on which a termination portion of an inside strap portion 32a and that of an outside strap portion 32b, of a strap 30 are fixed, and a second block 131b on which a front strap portion 31 of the strap 30 is fixed. The first block 131a is configured, by its part closer to a heel having been removed, so that a user has difficulty in mounting his/her heel thereon. The second block 131b is configured, by its outward part having been removed, so that while a big toe, an index toe and their base parts, of a user can be partially mounted thereon, a middle toe, a ring toe, a little toe and their base parts, of the user cannot be mounted thereon.

[0110] A second layer 132 is in a shape made by forming a foot circumference. A footbed 130 is made by adhering a lower surface of a first layer 131 and an upper layer of a second layer 132 to each other. While a first block 131a is fixed on a part closer to a heel, of a second layer 132, a second block 131b is fixed on a part closer to toes, of the second layer 132.

[0111] By a first layer 131 being fixed on a second layer 132, a footbed 130 is made. On the footbed 130, a recess portion 133a, which is in a form of L, is formed between a first block 131a and a second block 131b, and a recess portion 133b is formed on a part closer to a heel, of the second block 131b.

[0112] Footwear 13 is achieved by attaching a strap 30 to an footbed 130, like footwear 1 according to a first embodiment.

[0113] When a user wears footwear 13, a heel part on a foot sole of the user is opposed to a recess portion 133a. Further, a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, an arch-of-foot lateral part in flexor digitorum brevis muscles, and part of an arch of foot, of a user are opposed to a recess portion 133b. These parts stay away from, to the extent of level differences caused between themselves and upper surfaces of a first layer 131 and second layer 132 which are formed by the recess portions 133a, 133b, and they are opposed to an upper surface of the second layer 132.

[0114] Footwear 13 according to a 12th embodiment configured in this way exhibits the same advantageous effect as footwear 1 according to a first embodiment does. Further, it has a recess portion 133a and thereby, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 13 to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks. Furthermore, since a second layer 132 is made of highly flexible material, the second layer

132 is elastically deformed to a great extent, in the case where a foot sole gets into contact with the second layer 132. Since this makes the user less balanced, he/she, in order to keep balanced, comes to focus weight on an inward side portion of his/her foot sole. Additionally, since at least a second layer 132 is interposed between the ground and a foot sole, the foot sole can be prevented, when footwear 13 is used, from getting less clean and from treading directly on protruding objects.

[13th Embodiment]

[0115] Fig.17A is a plan view showing an appearance of footwear 14 according to a 13th embodiment of the present invention. Fig.17B is a plan view showing a reverse side of Fig.17A. Fig.17C is a side view obtained by seeing Fig.17A from a side closer to a little toe. Fig.17D is a front view of Fig.17A. The footwear 14 is a so-called beach sandal, and has a footbed 140 and a strap 30. Fig.17A shows a footwear 14 to wear on a left foot of a user, and since a footwear 14 to wear on a right foot thereof is bilaterally symmetrical with the footwear 14 to wear on a left foot, detail description is left out for the footwear 14 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0116] Footwear 14 is different from footwear 1 according to a first embodiment since it has a footbed 140 in place of a footbed 20 of a first embodiment.

[0117] A footbed 140 is made of rubber material, EVA urethane material, or the like, and is structured in two layers of a first layer 141 and a second layer 142. The first layer 141 has a removal portion 141a obtained by removing a part corresponding to a heel of a user, a toe portion 141b which toes of the user are mounted on, and a removal portion 141c obtained by removing parts corresponding to a middle toe, a ring toe, a little toe, and their base parts, of the user, as well as vicinity thereof.

[0118] A removal portion 141c is formed by making a notch in a longitudinal direction of a first layer 141 from an end portion closer to toes on the first layer 141, passing it through a site somewhat closer to a little toe as seen from a front strap portion 31, and passing it through a site somewhat closer to toes as seen from a termination portion of an outside strap portion 32b, to make a gentle arc-form cut as far as to an outward side portion of a footbed 140.

[0119] A second layer 142 is in a shape made by forming a foot circumference while having neither a removal portion 141a nor 141c formed in a first layer 141. A footbed 140 is made by adhering a lower surface of the first layer 141 and an upper surface of the second layer 142 to each other, and a level difference by an upper surface of the first layer 141 and an upper surface of the second layer 142 is caused on removal portion 141a, 141c sites. The second layer 142 is made of more flexible material

than the first layer 141 is. A slant 142a is formed closer to toes on a reverse surface of the second layer 142 whereas a slant 142b is formed closer to a heel thereon. The slant 142a is inclined upward so that the second layer 142 gets gradually smaller in thickness as closer to a toe side whereas the slant 142b is inclined upward so that the second layer 142 gets gradually smaller in thickness as closer to a heel side.

[0120] Footwear 14 is achieved by attaching a strap 30 to an footbed 140, like footwear 1 according to a first embodiment.

[0121] When a user wears footwear 14, a heel part on a foot sole of the user is opposed to a removal portion 141a. Further, a middle toe, a ring toe, a little toe and their base parts, an adductor hallucis transverse head part lying closer to a heel than the base parts do, and an arch-of-foot lateral part in flexor digitorum brevis muscles, of a user are opposed to a removal portion 141c. These parts stay away from, to the extent of a level difference caused by upper surfaces of a first layer 141 and a second layer 142 which are formed by the removal portions 141a, 141c, an upper surface of the second layer 142 while opposed thereto.

[0122] Footwear 14 according to a 13th embodiment configured in this way exhibits the same advantageous effect as footwear 1 according to a first embodiment does. Further, it has a removal portion 141a and thereby, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 14 to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks. Additionally, since a second layer 142 is made of highly flexible material, the second layer 142 is elastically deformed to a great extent, in the case where a foot sole gets into contact with the second layer 142 through removal portions 141a, 141c. Since this makes the user less balanced, he/she, in order to keep balanced, comes to focus weight on an inward side portion of his/her foot sole. In addition, since at least a second layer 142 is interposed between the ground and a foot sole, the foot sole can be prevented, when footwear 14 is used, from getting less clean and from treading directly on protruding objects. Besides, by slants 142a, 142b being formed on a reverse side of the second layer 142, the user is allowed to shift weight smoothly while walking. This allows footwear comfortable for walking, to be provided.

[14th Embodiment]

[0123] Fig.18A is a plan view showing an appearance of footwear 15 according to a 14th embodiment of the present invention. Fig.18B is a plan view showing a reverse side of Fig.18A. Fig.18C is a side view obtained by seeing Fig.18A from a side closer to a little toe. The footwear 15 is a so-called beach sandal, and has a footbed 150 and a strap 30. Fig.18A shows a footwear 15 to wear on a left foot of a user, and since a footwear 15 to wear on a right foot thereof is bilaterally symmetrical with

the footwear 15 to wear on a left foot, detail description is left out for the footwear 15 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0124] Footwear 15 is different from footwear 1 according to a first embodiment since it has a footbed 150 in place of a footbed 20 of a first embodiment.

[0125] A footbed 150 is made of rubber material, EVA urethane material, or the like, and is a plate-like member made by forming a foot circumference. The footbed 150 has a removal portion 150a obtained by removing a part corresponding to a heel of a user.

[0126] Footwear 15 according to a 14th embodiment configured in this way has a removal portion 150a, and thereby, a user gets into a posture like walking on tiptoe and is allowed through walking with the footwear 15 to be concomitantly trained for muscular strength from calves, through back thighs, to buttocks.

[15th Embodiment]

[0127] Fig.19A is a plan view showing an appearance of footwear 16 according to a 15th embodiment of the present invention. Fig.19B is a plan view showing a reverse side of Fig.19A. Fig.19C is a side view obtained by seeing Fig.19A from a side closer to a little toe. Fig.19D is a front view of Fig.19A. The footwear 16 is a so-called beach sandal, and has a footbed 160 and a strap 30. Fig.19A shows a footwear 16 to wear on a left foot of a user, and since a footwear 16 to wear on a right foot thereof is bilaterally symmetrical with the footwear 16 to wear on a left foot, detail description is left out for the footwear 16 to wear on a right foot. Additionally, a member identical to a member of footwear 1 shown in Fig.1, Fig.2, or a member functionally identical thereto is made to be identical thereto for a symbol to be allocated, and has its detail description left out.

[0128] Footwear 16 is different from footwear 1 according to a first embodiment since it has a footbed 160 in place of a footbed 20 of a first embodiment.

[0129] A footbed 160 is made of rubber material, EVA urethane material, or the like, and is structured in two layers of a first layer 161 and a second layer 162. The first layer 161 has a removal portion 161a obtained by removing a part corresponding to a heel of a user. The second layer 162 is in a shape made by forming a foot circumference while having no removal portion 161a formed in a first layer 161. The second layer 162 is as rigid as the first layer 161.

[0130] A slant 161b is formed on a reverse surface of a fringe portion closer to toes, of a first layer 161. A slant 162a is formed on a reverse surface of a fringe portion closer to toes, of a second layer 162. Both the slant 161b and the slant 162a are inclined upward to toes. This makes toe parts of the first layer 161 and the second layer 162 decrease gradually in sheet thickness.

[0131] A footbed 160 is made by adhering a lower surface of a first layer 161 and an upper surface of a second layer 162 to each other, and a recess portion (level difference) by an upper surface of the first layer 161 and an upper surface of the second layer 162 is caused on a removal portion 161a site. Additionally, by a slant 161b site of the first layer 161 and a slant 162a site of the second layer 162 being superposed on each other, a slant which is inclined upward to toes is formed on a reverse side of a toe portion on the footbed 160.

[0132] Footwear 16 is achieved by attaching a strap 30 to an footbed 160, like footwear 1 according to a first embodiment.

[0133] When a user wears footwear 16, a heel part on a foot sole of the user stays away, to the extent of a level difference caused by a removal portion 161a, from and is opposed to an upper surface of a second layer 162.

[0134] Since footwear 16 according to a 15th embodiment configured in this way has a slant formed on a reverse side of a toe portion, a slant on the reverse side of a toe portion abuts on the ground on an event of walking to allow a center of gravity to move smoothly on the event of walking so that a user can walk more easily. Additionally, since at least a second layer 162 is interposed between the ground and a foot sole, the foot sole can be prevented, when footwear 16 is used, from getting less clean and from treading directly on protruding objects.

[0135] Although embodiments of the present invention are described as above, the embodiments of the present invention should not be limited to embodiments mentioned above. For example, although the embodiments mentioned above are described with beach sandals as their examples, they can be also applied to zori. Further, although footbeds are made of rubber material, EVA urethane material, or the like, footbed materials should not be limited thereto. For example, they may be made of wood material.

Explanation of symbols

[0136]

1~16: footwear
20, 25, 40, 50, 60, 70, 80, 90, 100,
110,120,130,140,150,160: footbed
20a,40a, 70a, 121 a: heel portion
20b,40b,51b,61b,70b,80b,101b,121b,141b: toe
portion
20c,20d,26a,51a,51c,61a,61c,70c,101a,101c,141a
,141c,150a,161a: removal portion
26,61,101,121,131,161 first layer
27,62,102,122,132,162: second layer
30: strap
31: front strap portion
32: side strap portion
32a: inside strap portion
32b: outside strap portion

33: big toe strap
 34: ankle strap
 40c, 90a, 90c, 110a, 110b, 121c, 133a, 133b: recess portion
 51d, 61d, 61e, 62a, 80d, 142a, 142b, 161b, 162a: slant 5
 71: flexible bed
 80a: heel recess portion
 80c: outside recess portion
 131a: first block
 131b: second block 10

Claims

1. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,

wherein said footbed has a heel portion on which to mount a heel of a user, and a removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said heel portion, and

wherein the removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user.
2. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,

wherein said footbed has a heel portion on which to mount a heel of a user and a thin portion obtained by decreasing, in thickness, a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said heel portion, and

wherein the thin portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, but is not opposed to a part lying closer to a big toe than said front strap portion does.
3. Footwear according to claim 1, wherein said footbed has further a heel removal portion obtained by removing a heel part.
4. Footwear according to claim 2,
5. Footwear according to claim 2,

wherein said footbed has a vertical two-layer structure,

wherein an upper layer which is one layer of the two-layer structure is in a shape made by forming a foot circumference while providing no removal portion, and

wherein a lower layer which is another layer of the two-layer structure has a heel portion on which to mount a heel of a user, and a removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said heel portion.
6. Footwear according to claim 4 or 5, wherein said footbed further has a heel removal portion obtained by removing a heel part.
7. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,

wherein said footbed has a recess portion on its reverse surface,

wherein the recess portion is opposed through a bottom portion of said recess portion to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and

wherein said bottom portion has flexibility.
8. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,

wherein said footbed has a vertical two-layer structure,

- wherein an upper layer which is one layer of the two-layer structure has a first removal portion obtained by removing a site opposed to a heel of a user and a second removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first removal portion, wherein a lower layer which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion, wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and wherein a level-difference part formed by an upper surface of said upper layer and an upper surface of said lower layer in said second removal portion is provided with a slant.
9. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,
- wherein said footbed has a vertical two-layer structure, wherein an upper layer which is one layer of the two-layer structure has a first removal portion obtained by removing a site opposed to a heel of a user and a second removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first removal portion, wherein a lower layer which is another layer of said two-layer structure is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion, wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and wherein a level-difference part formed by an upper surface of said upper layer and an upper surface of said lower layer in said second removal portion, and an end portion closer to toes on a reverse surface of said footbed are provided with a slant.
10. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on, and
- wherein said footbed has a vertical two-layer structure, wherein an upper layer which is one layer of the two-layer structure has a first removal portion obtained by removing a site opposed to a heel of a user and a second removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first removal portion, wherein a lower layer which is another layer of said two-layer structure is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion, wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and wherein a level-difference part formed by an upper surface of said upper layer and an upper surface of said lower layer in said second removal portion is provided with a slant.
11. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,
- wherein said footbed has a first recess portion opposed to a heel of a user and a second recess portion opposed to a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first recess portion, wherein said second recess portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and wherein a reverse surface of an end portion closer to toes of said footbed is provided with a slant inclined to a big toe of the user.
12. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,
- wherein said footbed has a recess portion on its reverse surface, wherein the recess portion is opposed through a bottom portion of said recess portion to at least a big toe, an index toe and their base parts, of a user, and wherein said bottom portion has flexibility.
13. Footwear having a footbed which a foot is mounted on, a first belt-like member which is attached to the footbed in an arch-like shape so that a big toe can be inserted therein, and a second belt-like member which is attached to the footbed, on a side closer to a heel as seen from said first belt-like member, in an arch-like shape so that a top of foot can be inserted therein,
- wherein said footbed has a vertical two-layer structure, wherein an upper layer which is one layer of the two-layer structure has a first removal portion obtained by removing a site opposed to a heel of a user and a second removal portion obtained

- by removing a site being closer to a little toe as seen from said first belt-like member while closer to toes as seen from said first removal portion, wherein a lower layer which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion, and wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of the user.
14. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,
- wherein said footbed has a first recess portion and a second recess portion on its reverse surface, wherein said first recess portion is opposed through a bottom portion of the first recess portion to a heel of a user, wherein said second recess portion is opposed through a bottom portion of the second recess portion to a big toe, an index toe and their base parts, of the user, and wherein bottom portions of said first recess portion and second recess portion have flexibility.
15. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,
- wherein said footbed has a gap portion extending toward a big toe from a thickness-direction medial portion on a side surface closer to a little toe as seen from said front strap portion, and wherein the gap portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user.
16. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,
- wherein said footbed has a vertical two-layer structure,
- wherein an upper layer which is one layer of the two-layer structure has a first block on which said front strap portion is placed, and a second block on which a termination portion of said side strap portion is placed, wherein a lower layer which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference, wherein a first recess portion is formed between said first block and said second block while a second recess portion which a heel of a user is opposed to is formed closer to the heel as seen from said second block, and wherein said first recess portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of the user.
17. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,
- wherein said footbed has a vertical two-layer structure, wherein an upper layer which is one layer of the two-layer structure has a first removal portion obtained by removing a site opposed to a heel of a user, and a second removal portion obtained by removing a site being closer to a little toe as seen from said front strap portion while closer to toes as seen from said first removal portion, wherein a lower layer which is another layer of said two-layer structure is made of material more flexible than said upper layer is, and is in a shape made by forming a foot circumference while providing said upper layer with neither said first removal portion nor said second removal portion, wherein said second removal portion is opposed to at least a middle toe, a ring toe, a little toe and their base parts, as well as an adductor hallucis transverse head part lying closer to a heel than the base parts do, of a user, and wherein an end portion closer to toes and an end portion closer to a heel, on a reverse surface of said footbed are provided with slants, respectively.
18. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on, and wherein said footbed comprises a flat plate member

and has a removal portion obtained by removing a site opposed to a heel of a user.

19. Footwear having a strap comprising a front strap portion interposed between a big toe and an index toe, and a side strap portion put on a top of foot, and a footbed which the strap is attached to and a foot is mounted on,

wherein said footbed comprises a flat plate member and has a recess portion on a site opposed to a heel of a user, and wherein an end portion closer to toes on a reverse surface of said footbed is provided with a slant.

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Fig. 1

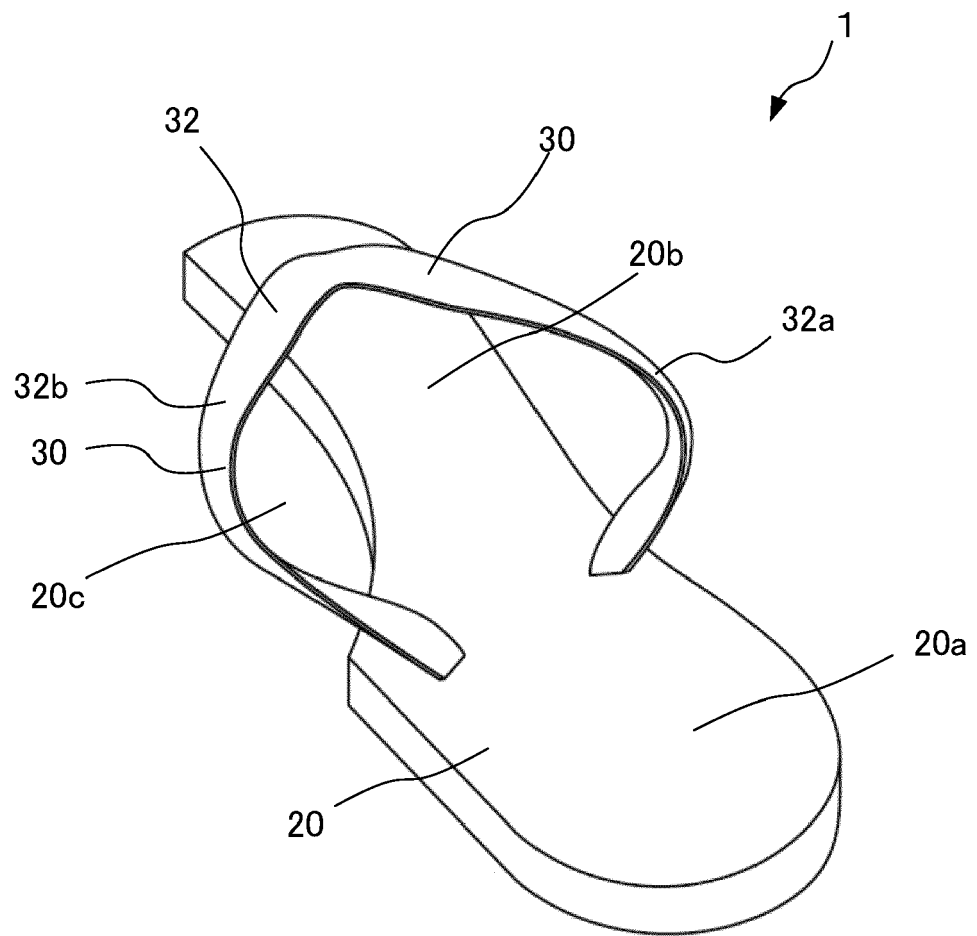


Fig. 2

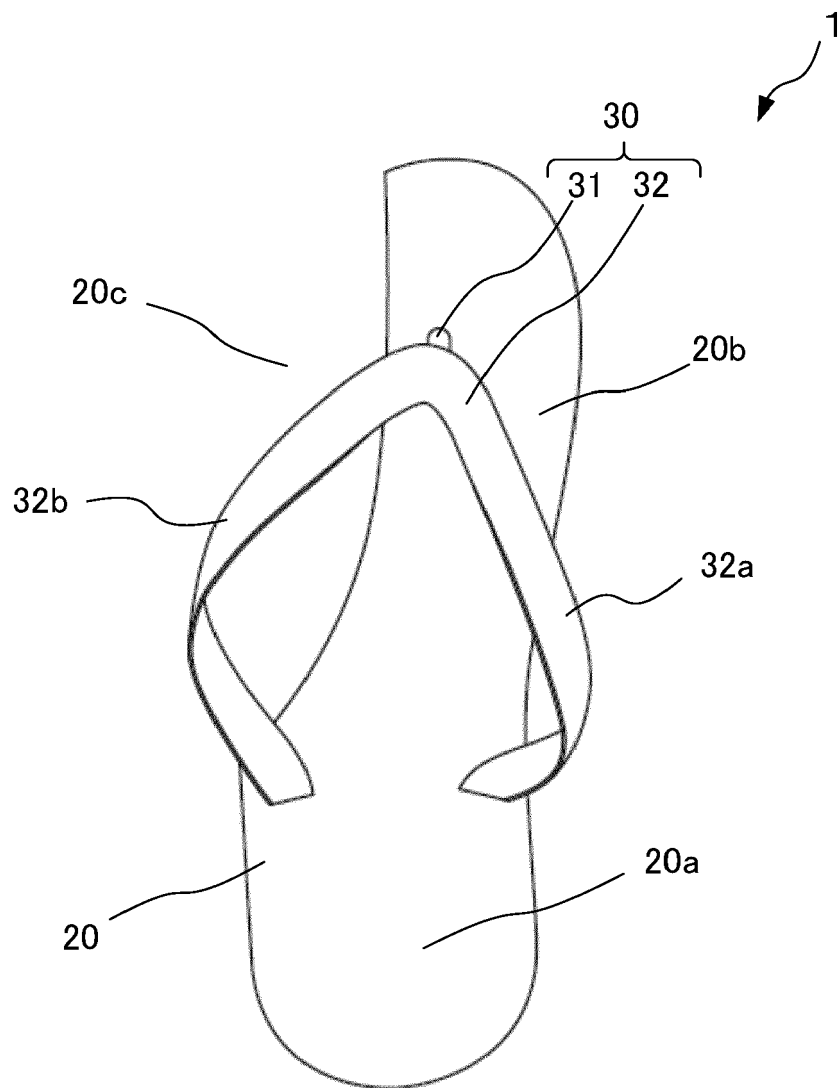


Fig. 3

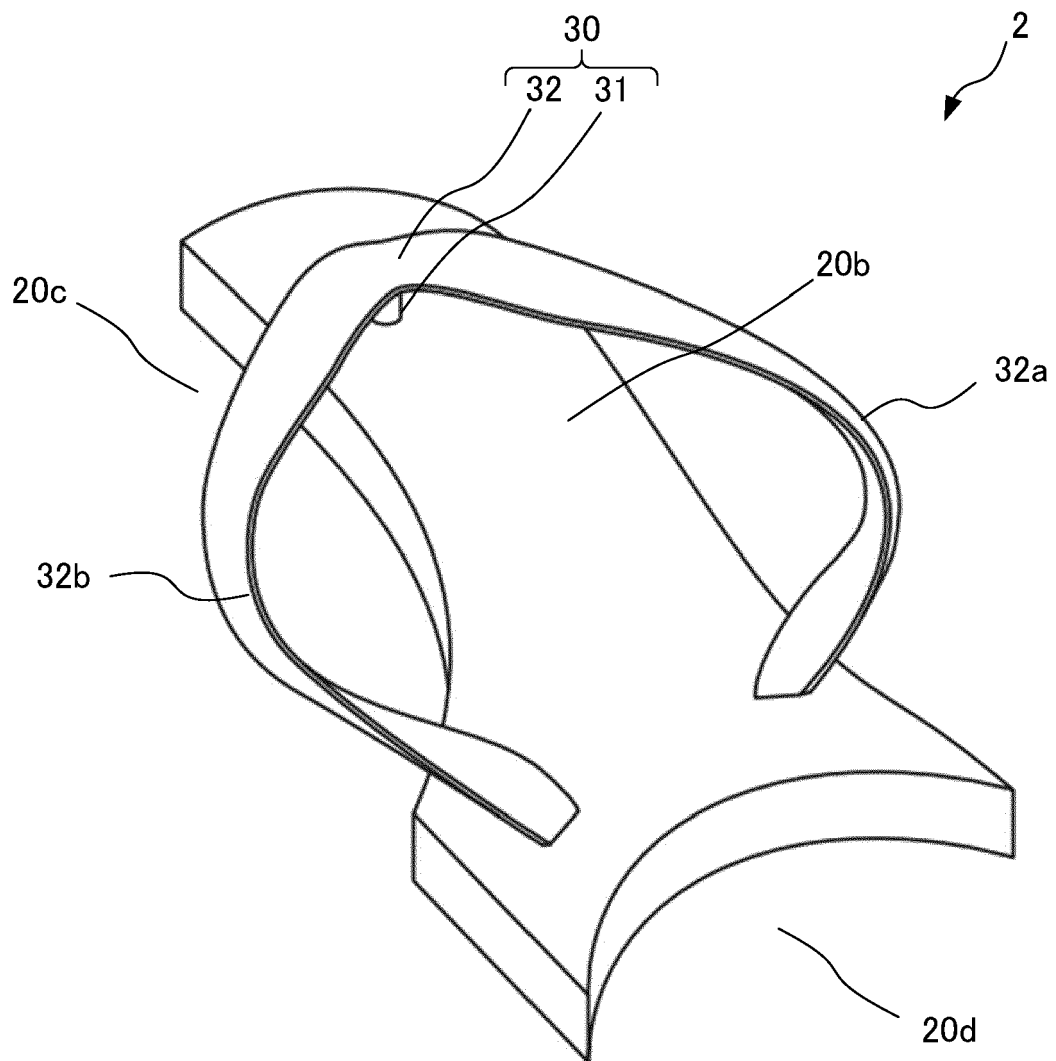


Fig. 4

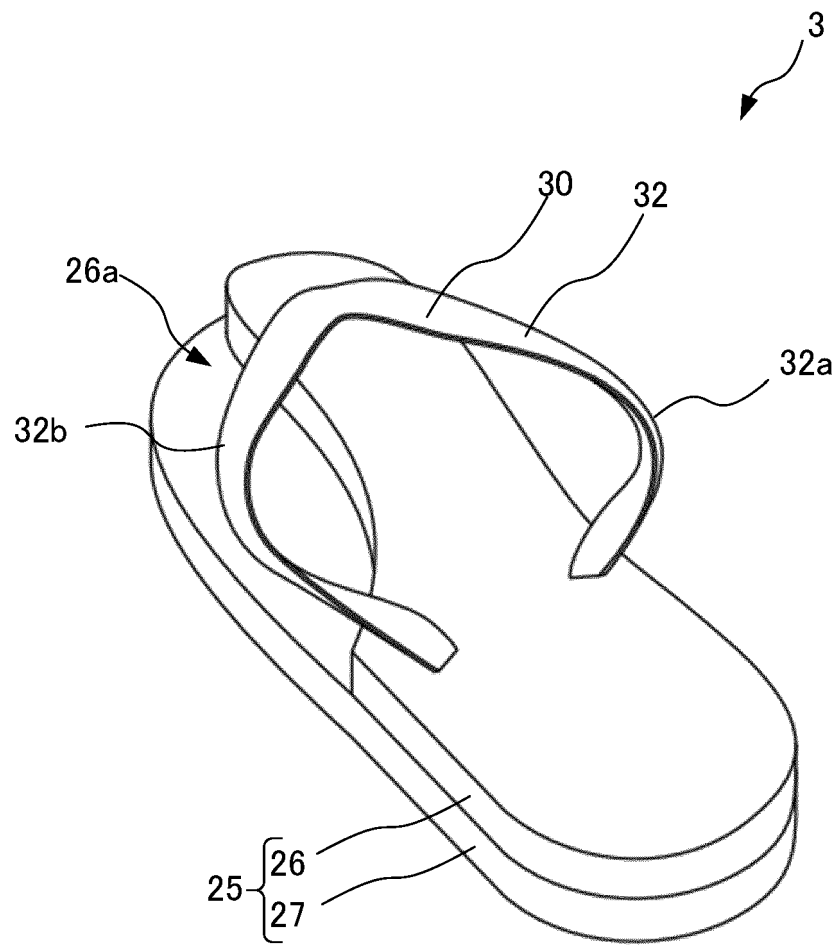


Fig. 5

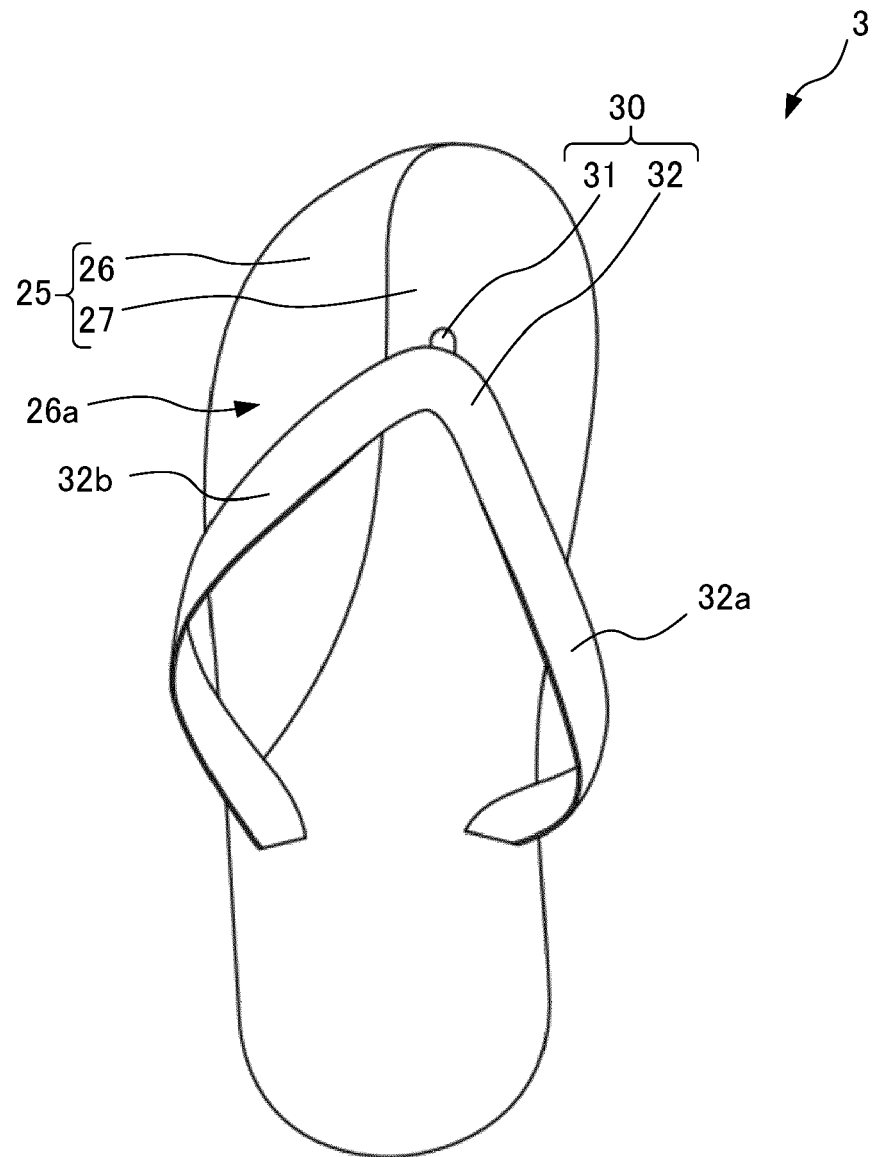


Fig. 6

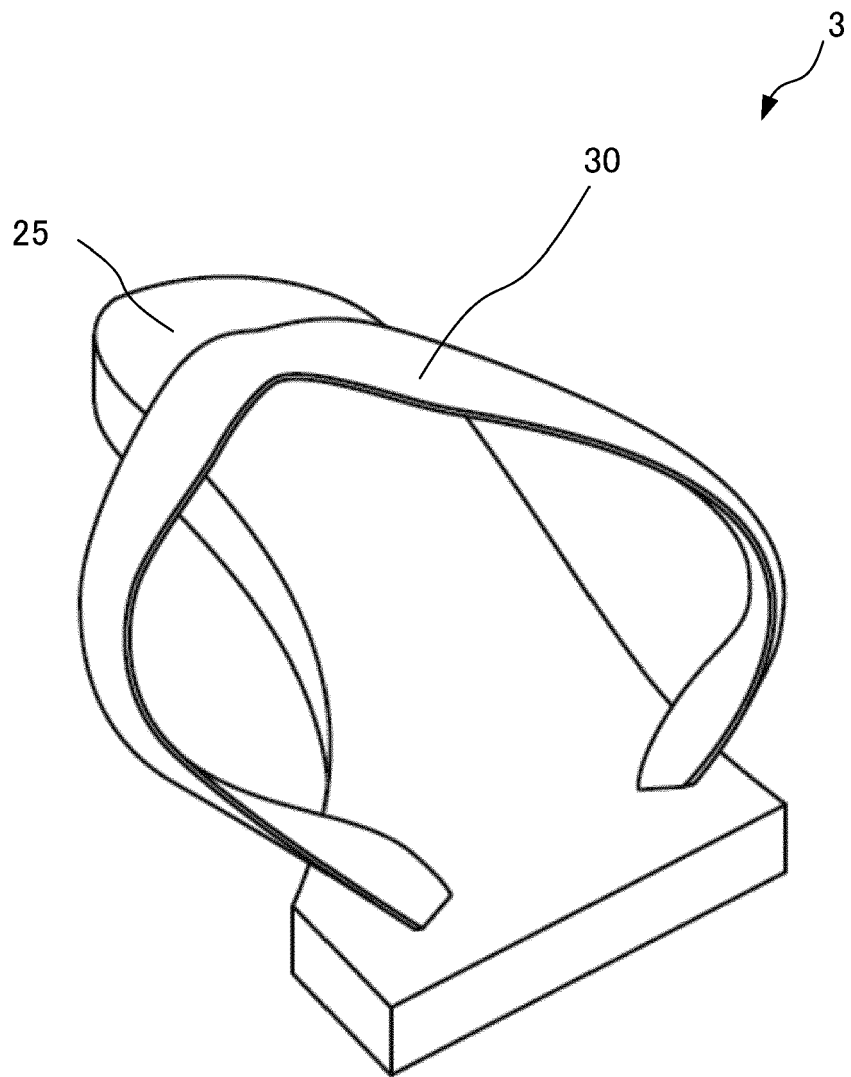


Fig. 7A

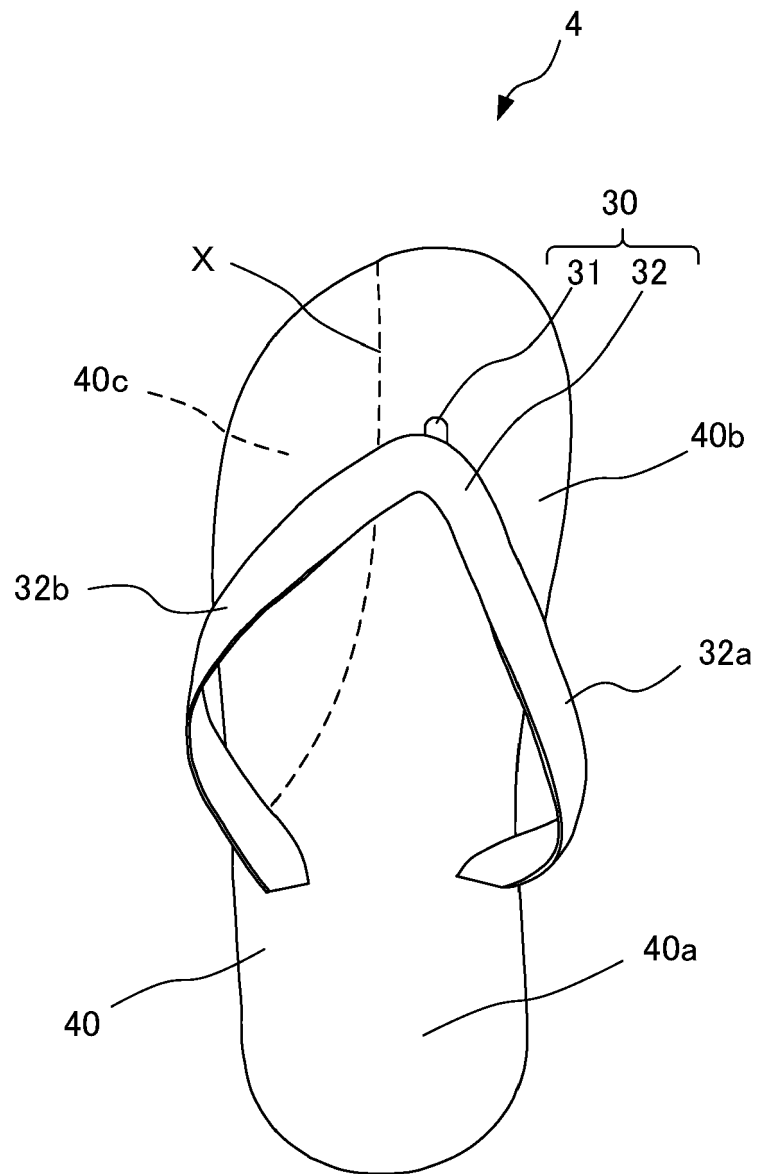


Fig. 7B

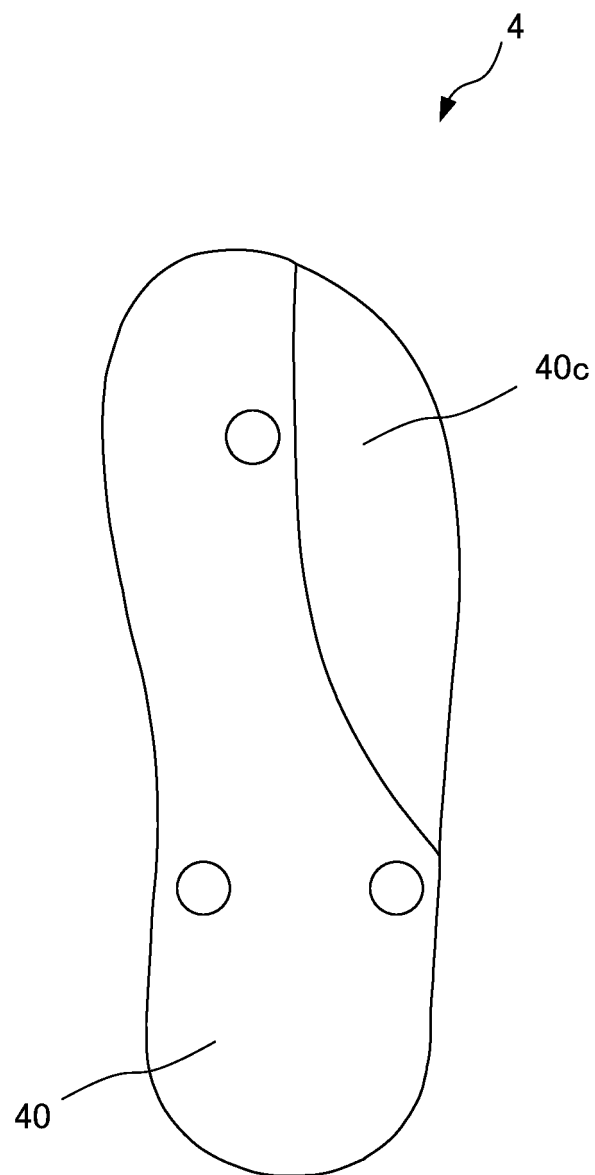


Fig. 7C

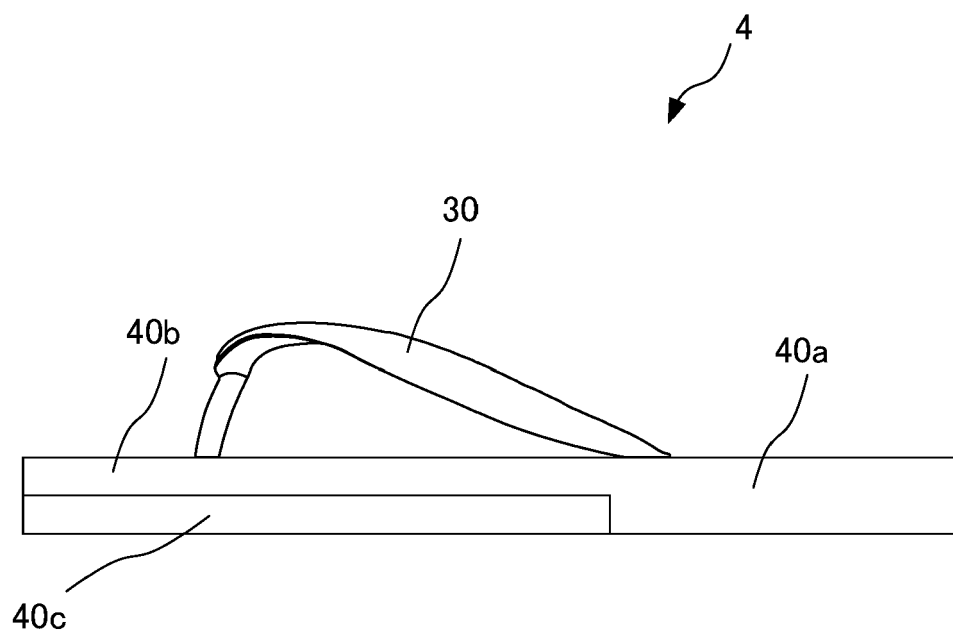


Fig. 8A

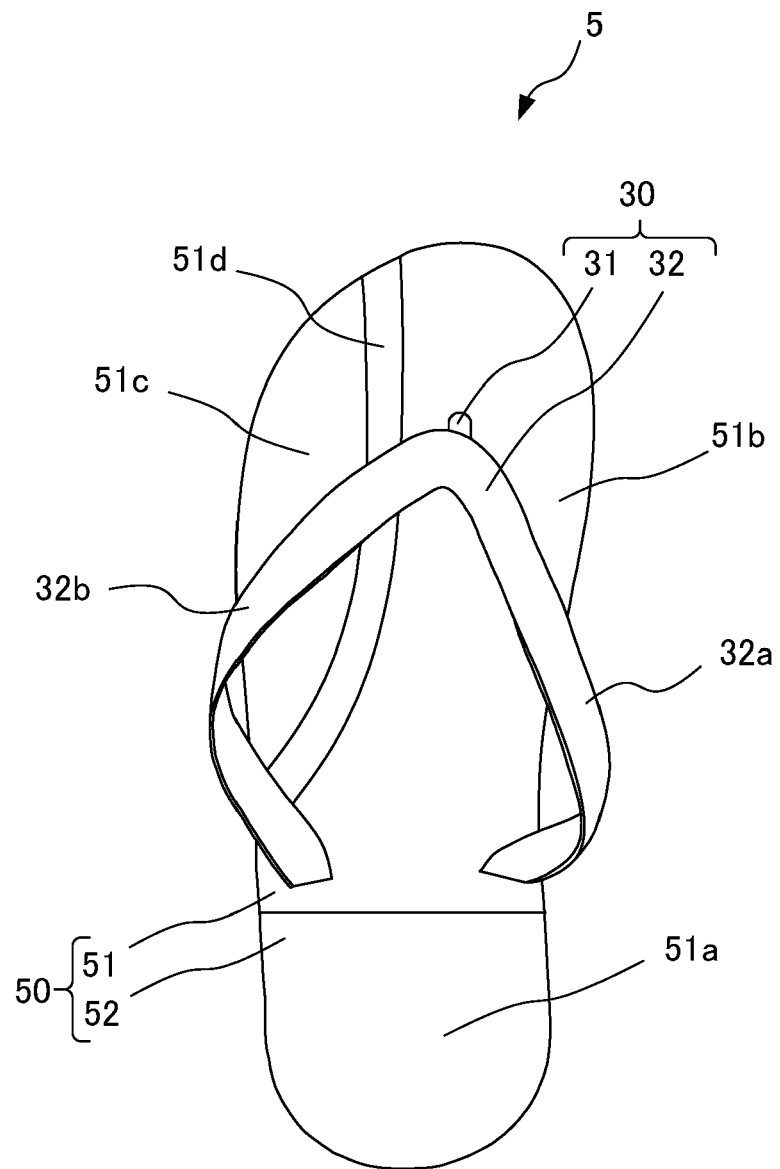


Fig. 8B

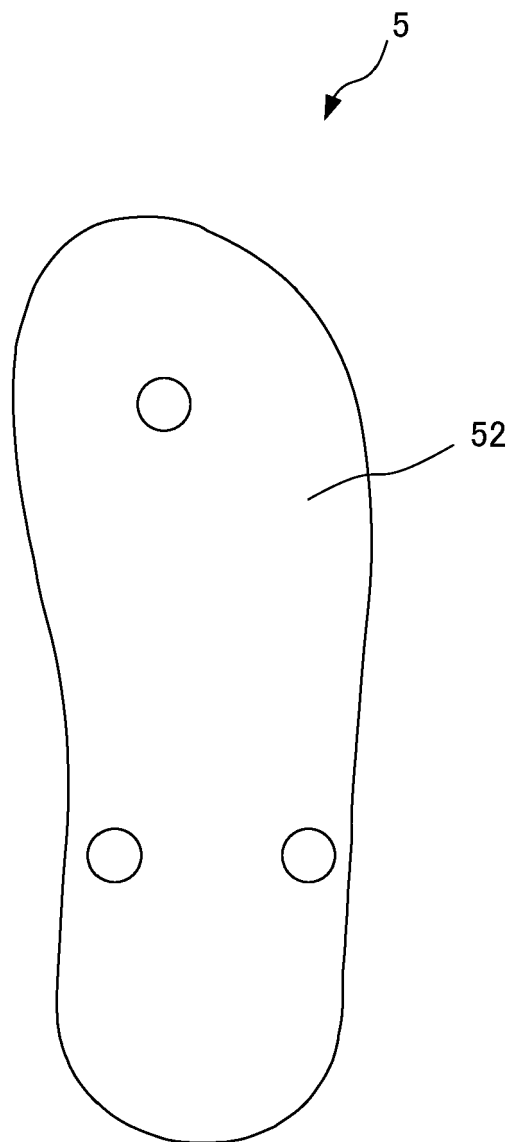


Fig. 8C

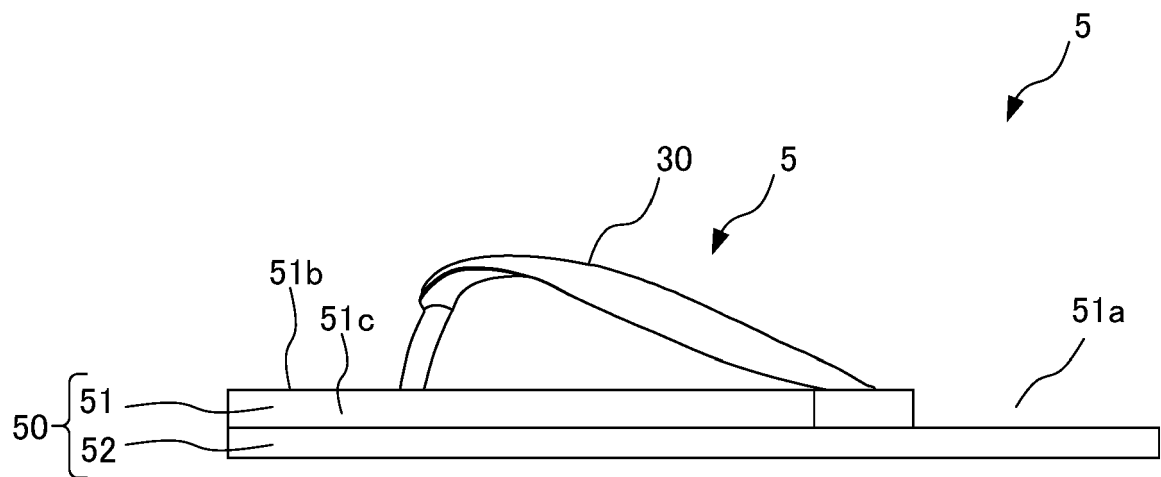


Fig. 8D

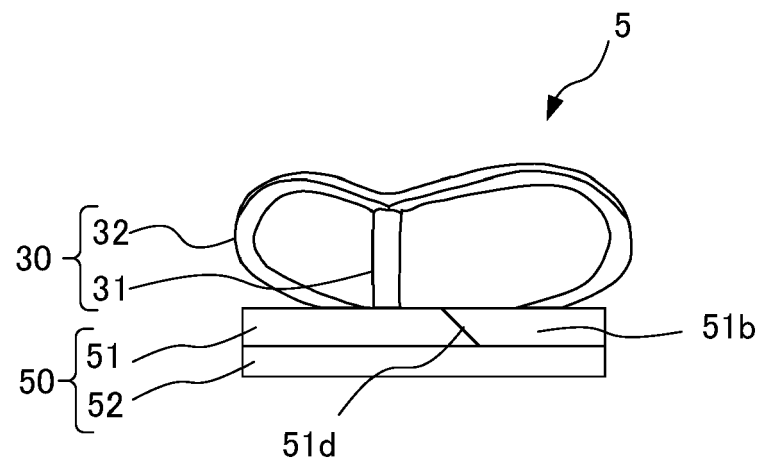


Fig. 9A

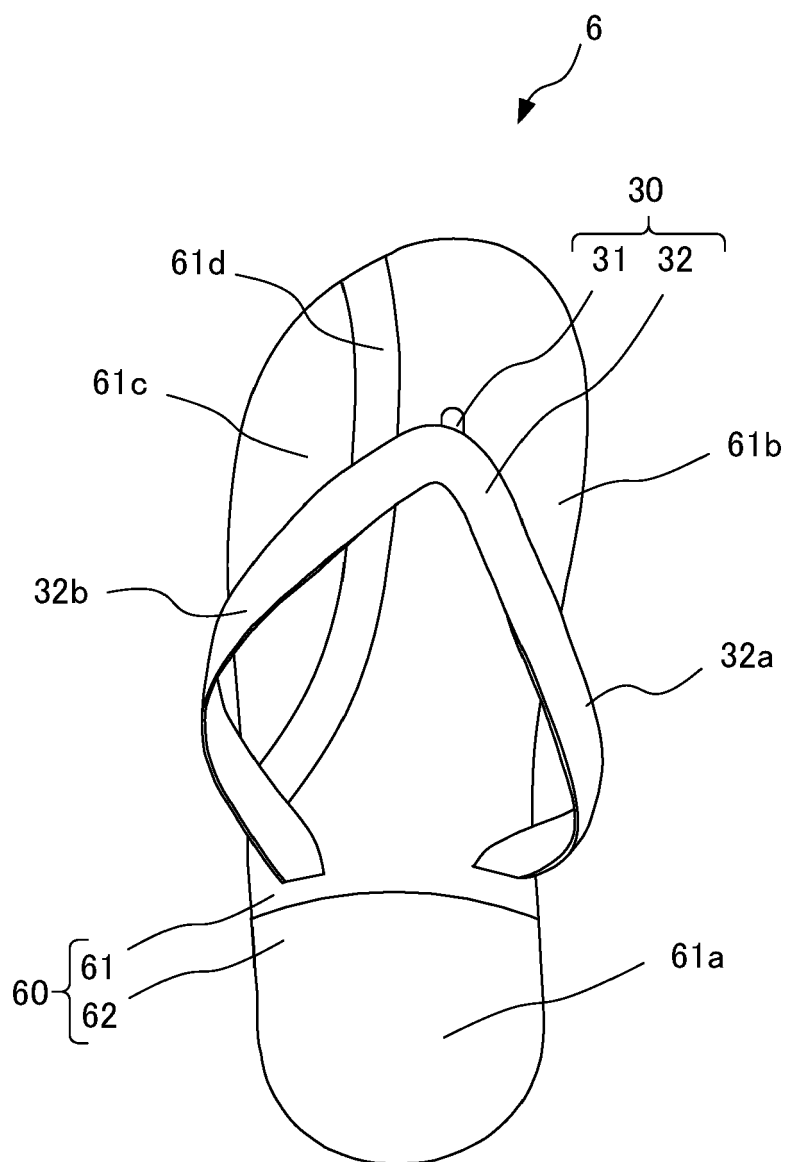


Fig. 9B

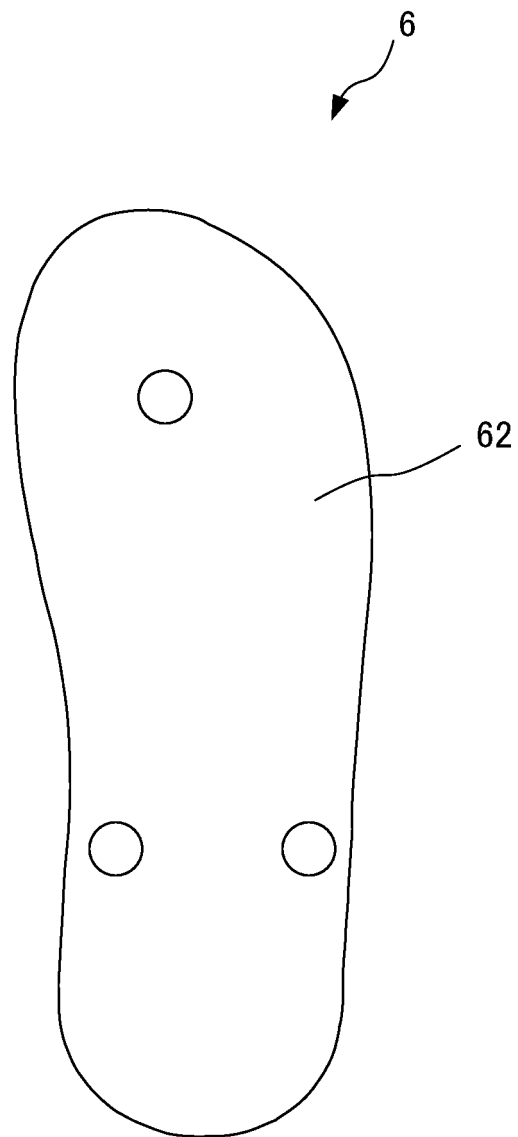


Fig. 9C

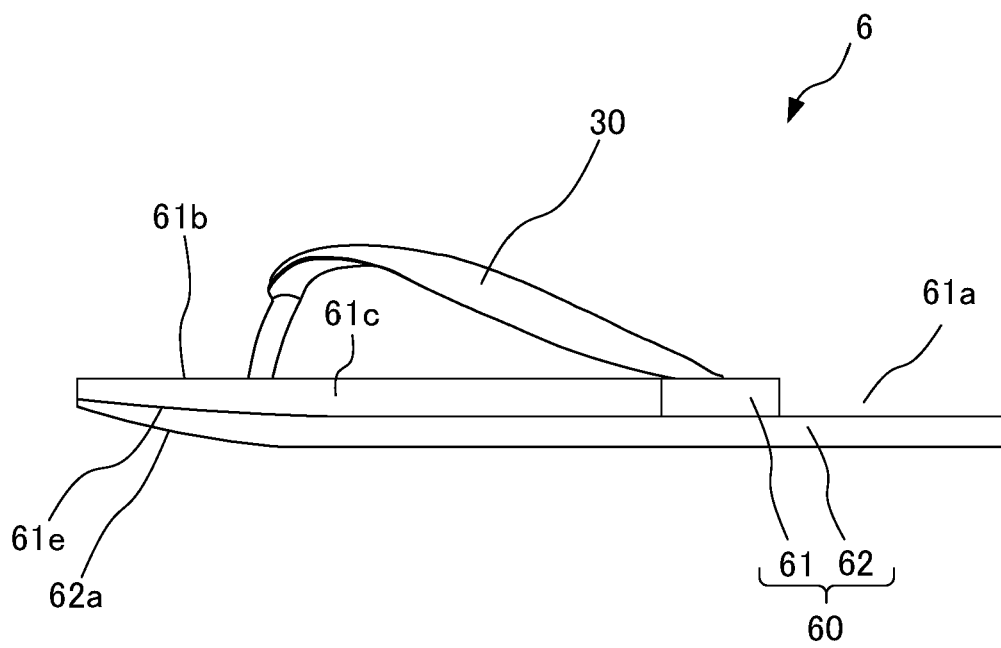


Fig. 9D

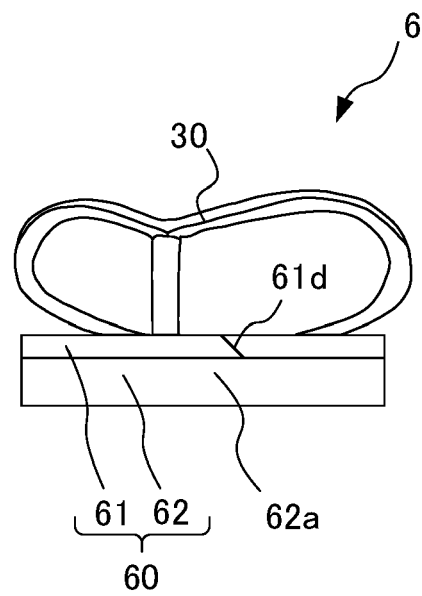


Fig. 10A

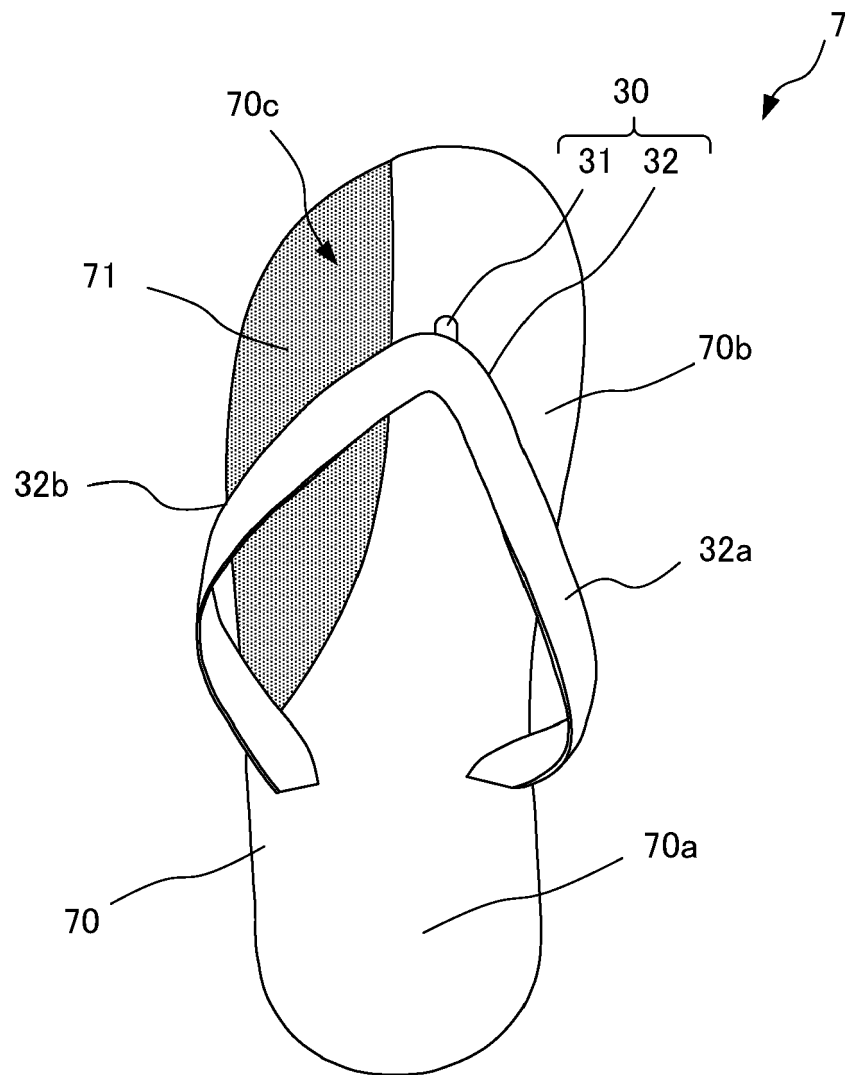


Fig. 10B

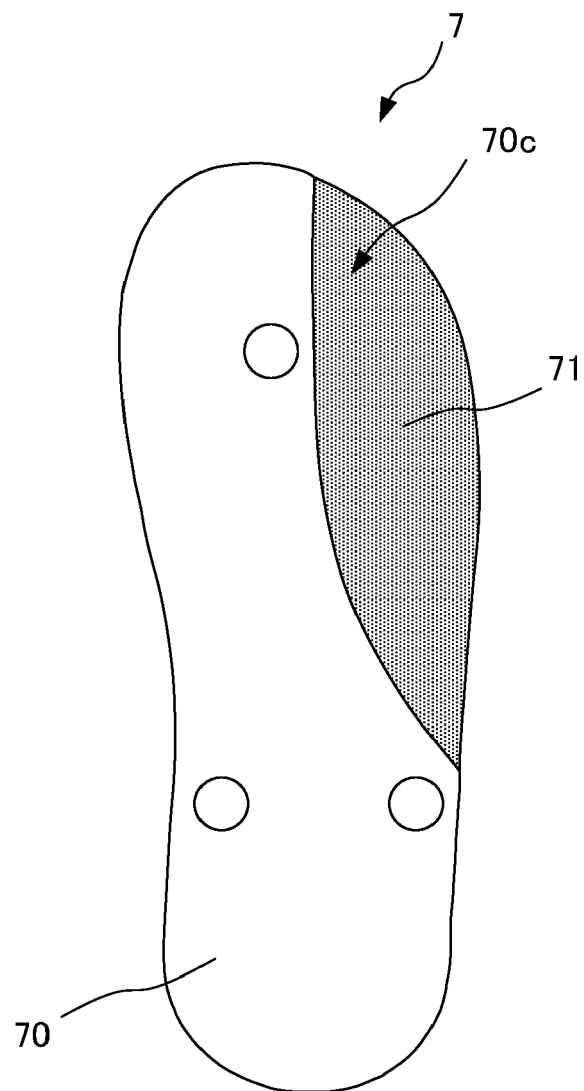


Fig. 10C

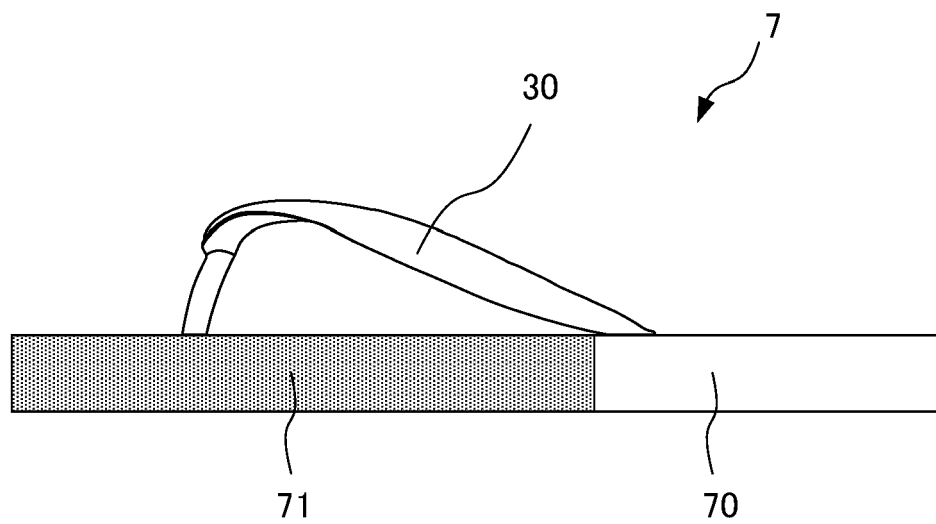


Fig. 11A

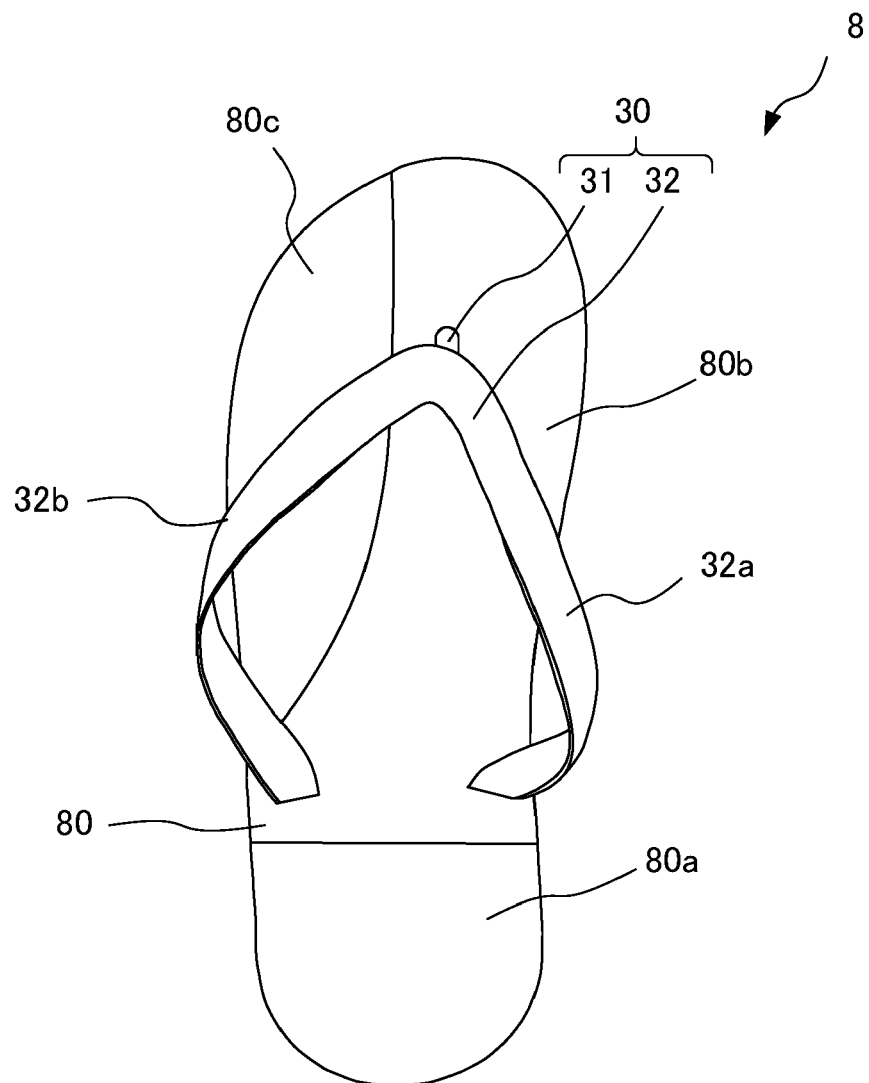


Fig. 11B

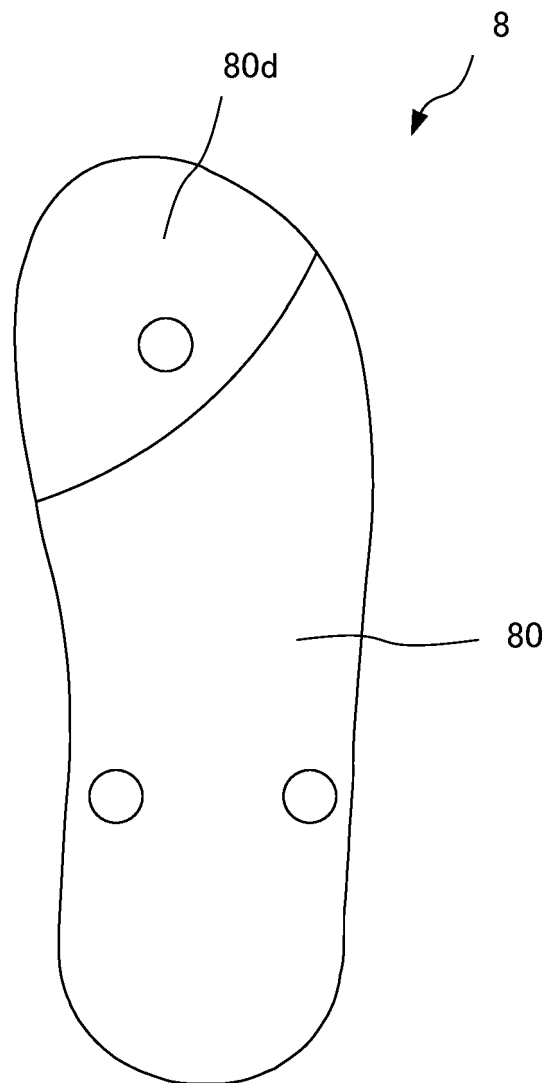


Fig. 11C

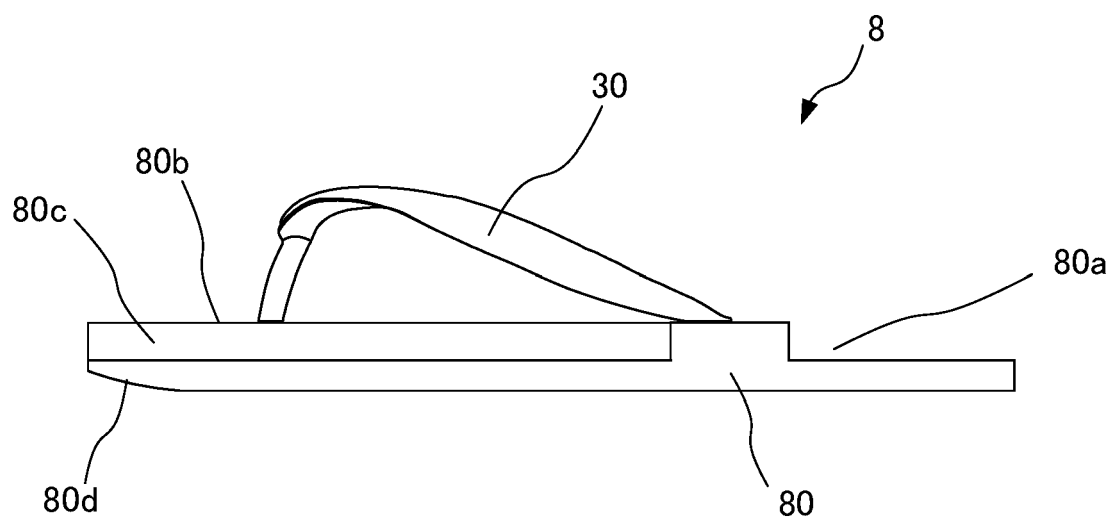


Fig. 11D

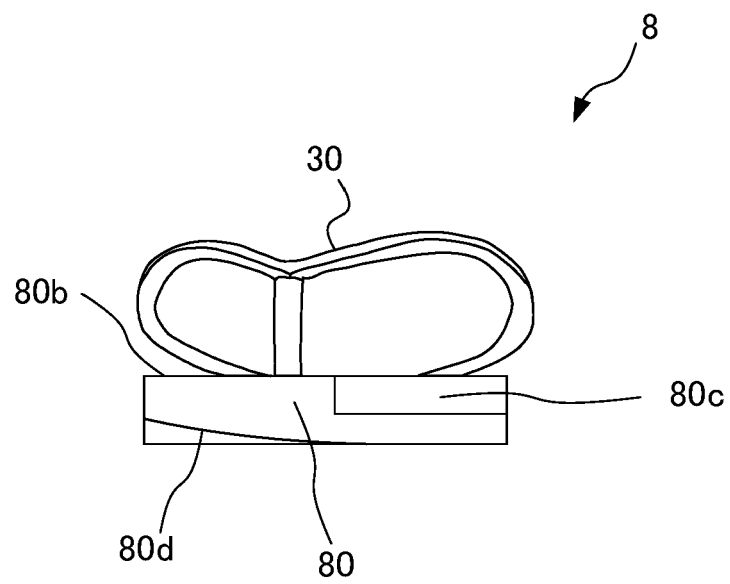


Fig. 12A

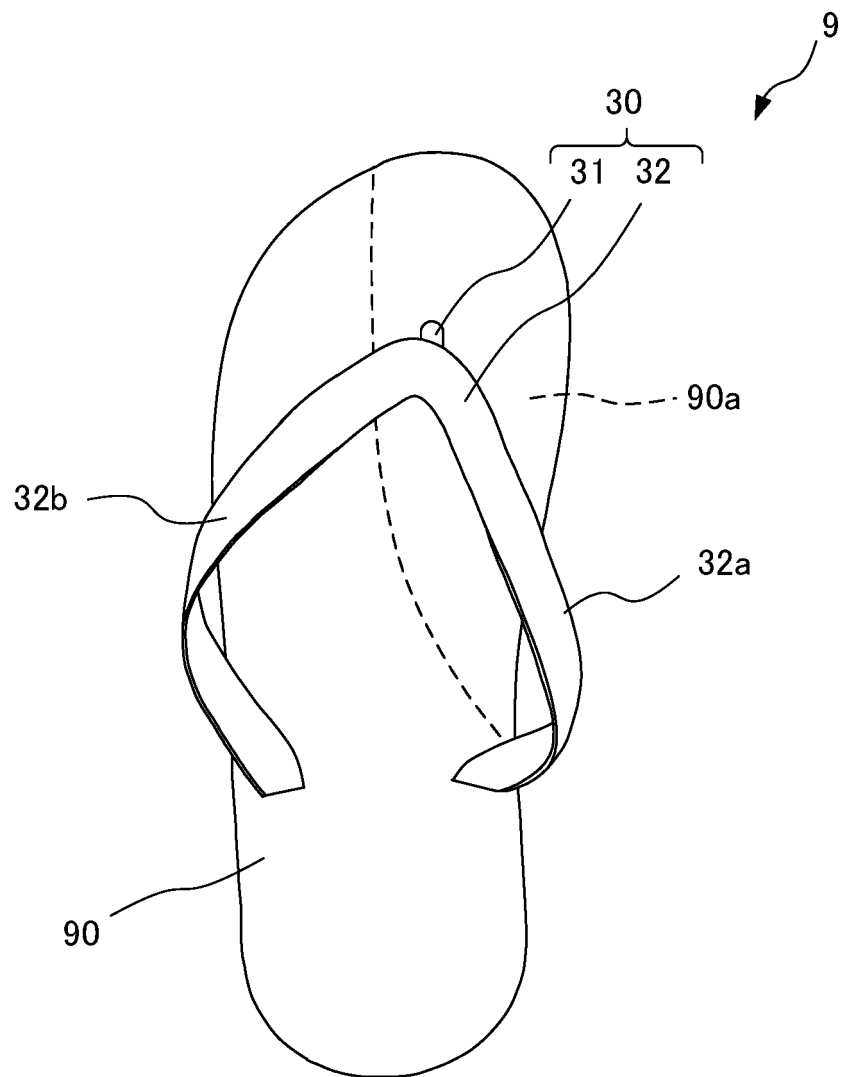


Fig. 12B

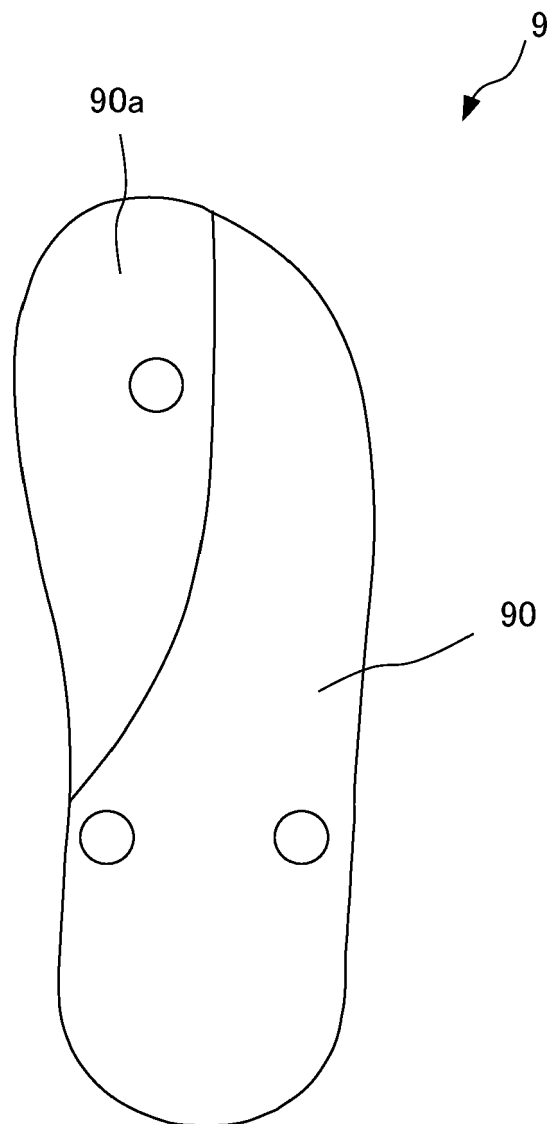


Fig. 12C

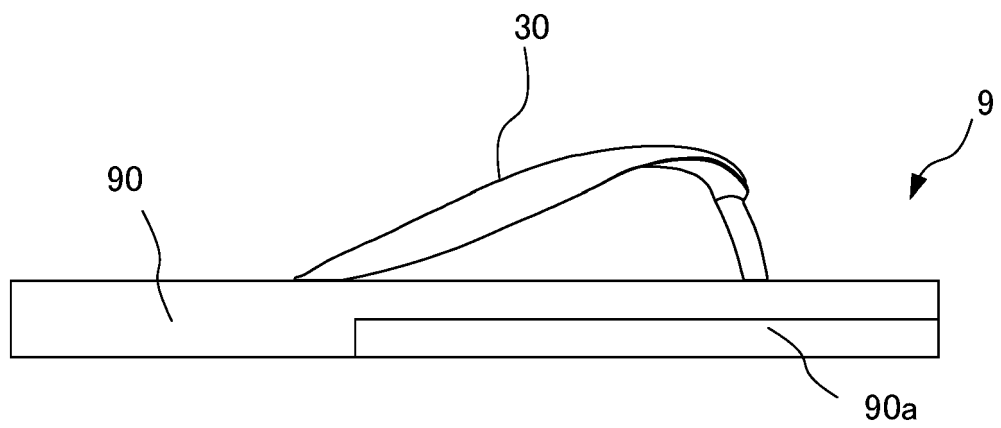


Fig. 12D

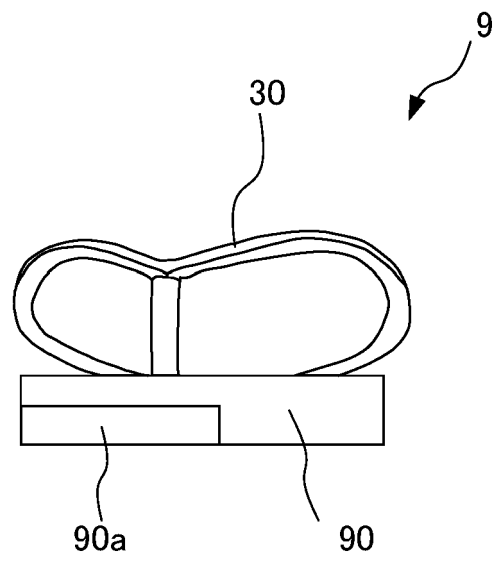


Fig. 13A

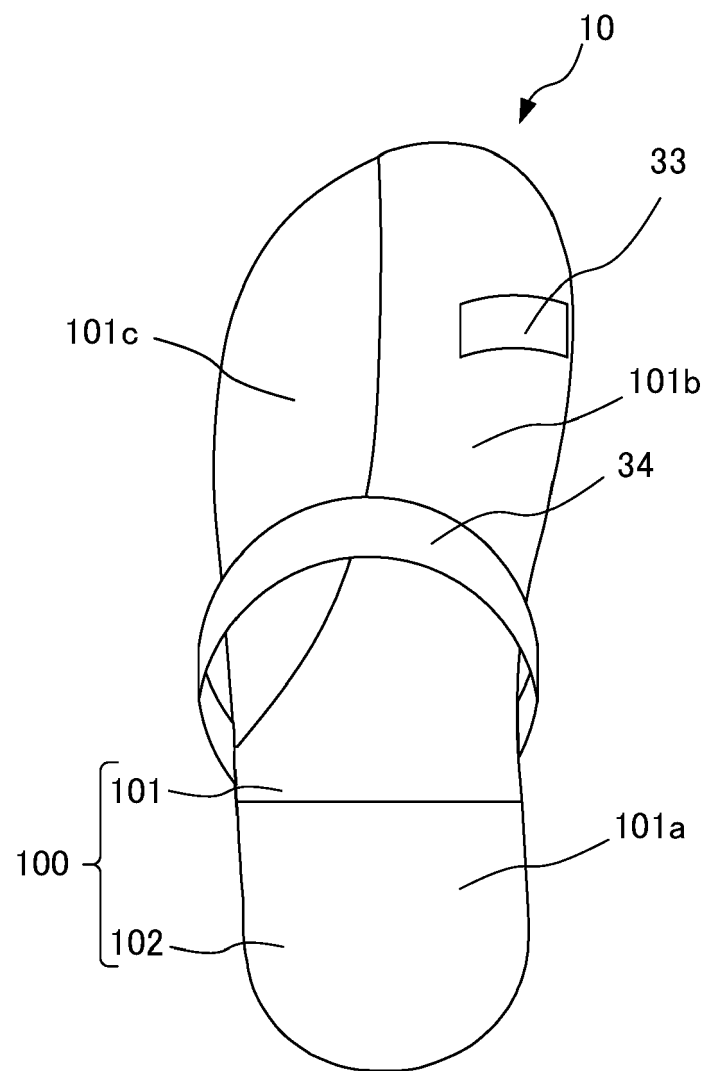


Fig. 13B

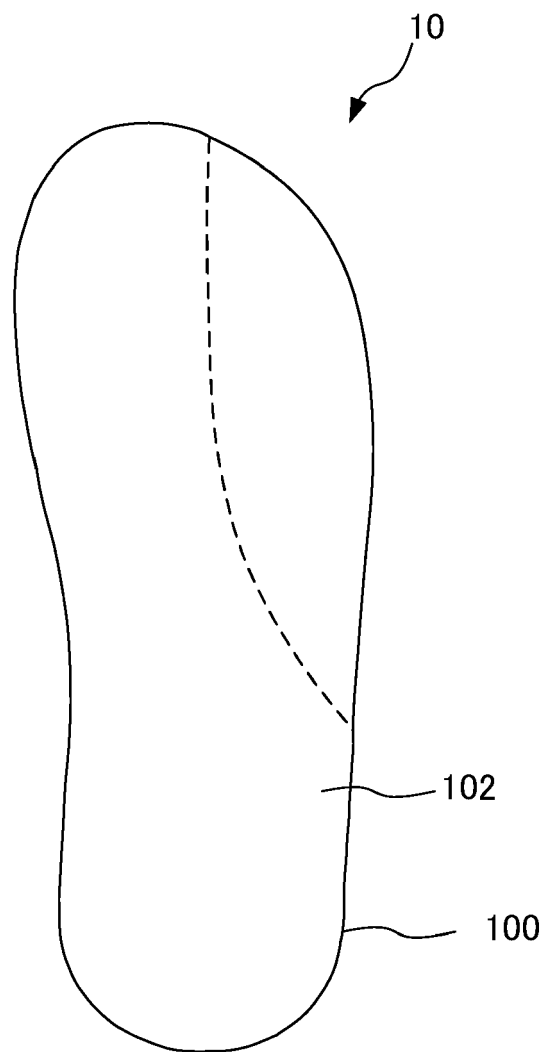


Fig. 13C

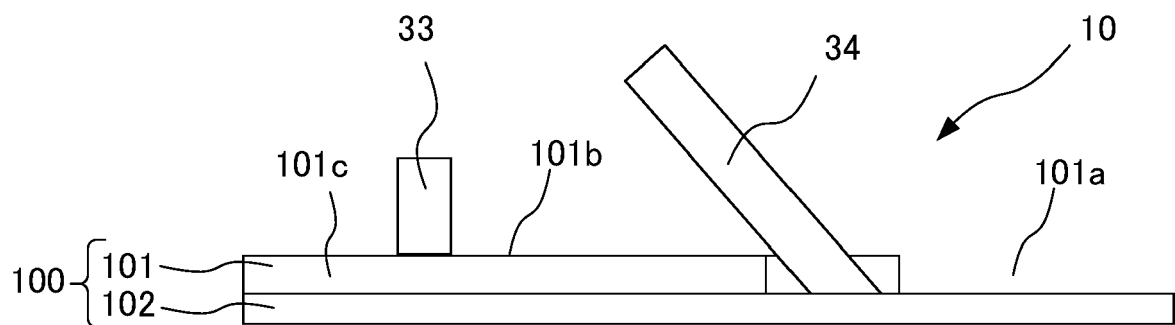


Fig. 13D

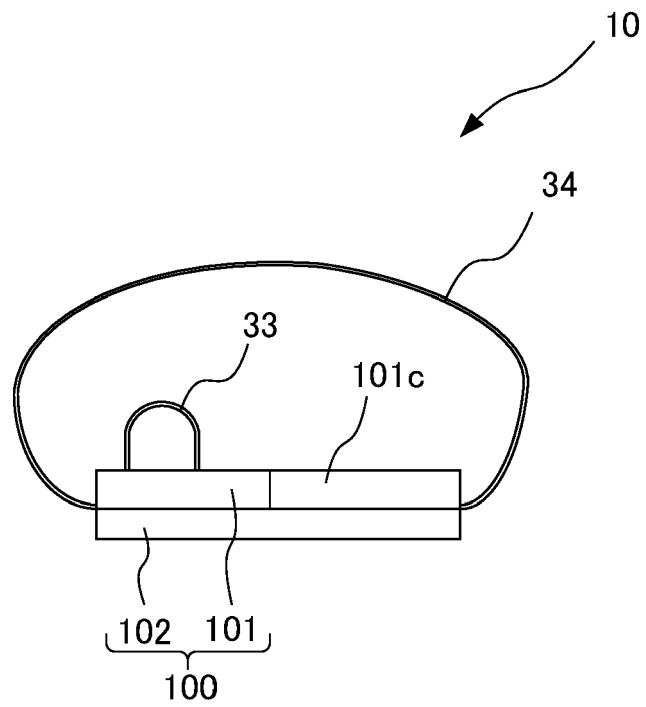


Fig. 14A

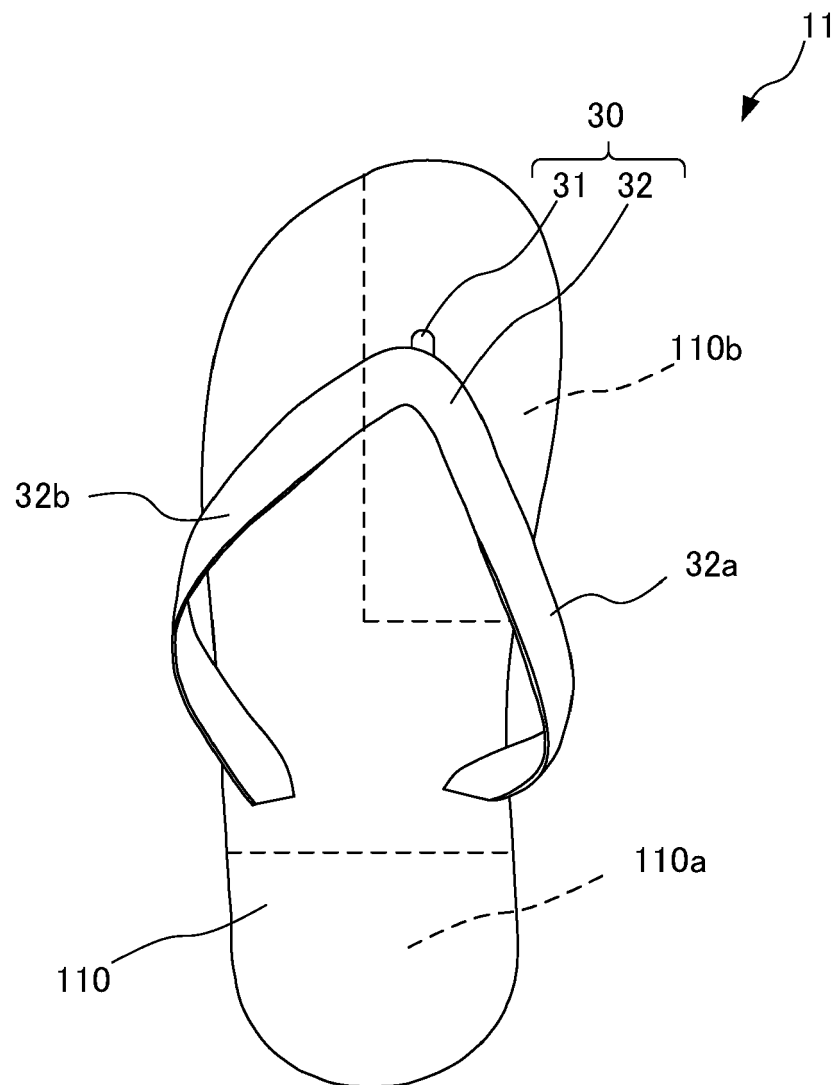


Fig. 14B

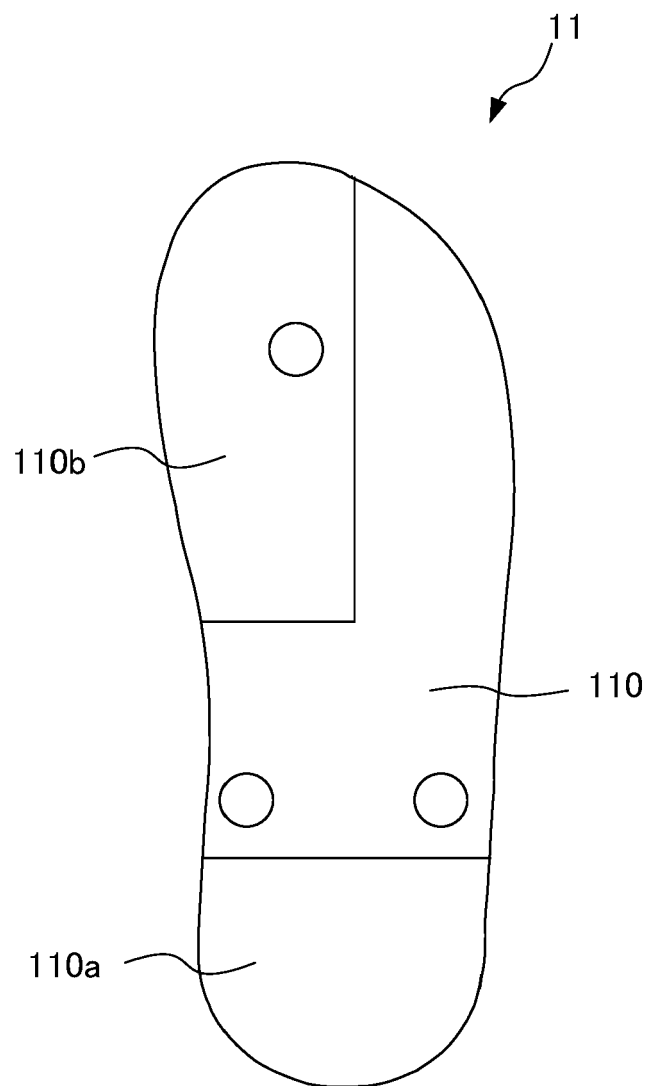


Fig. 14C

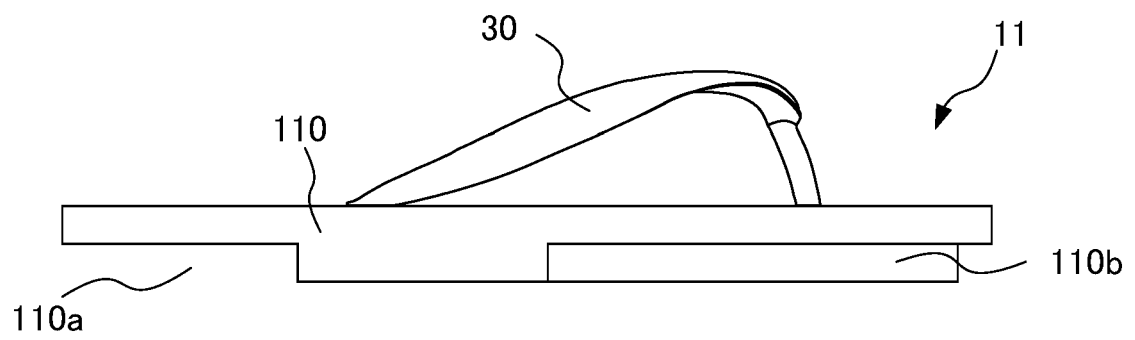


Fig. 14D

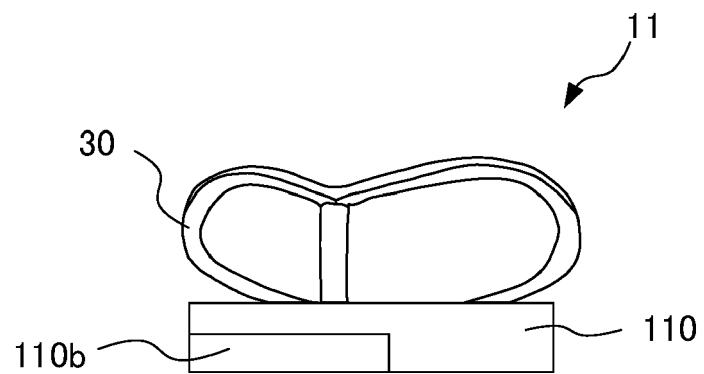


Fig. 15A

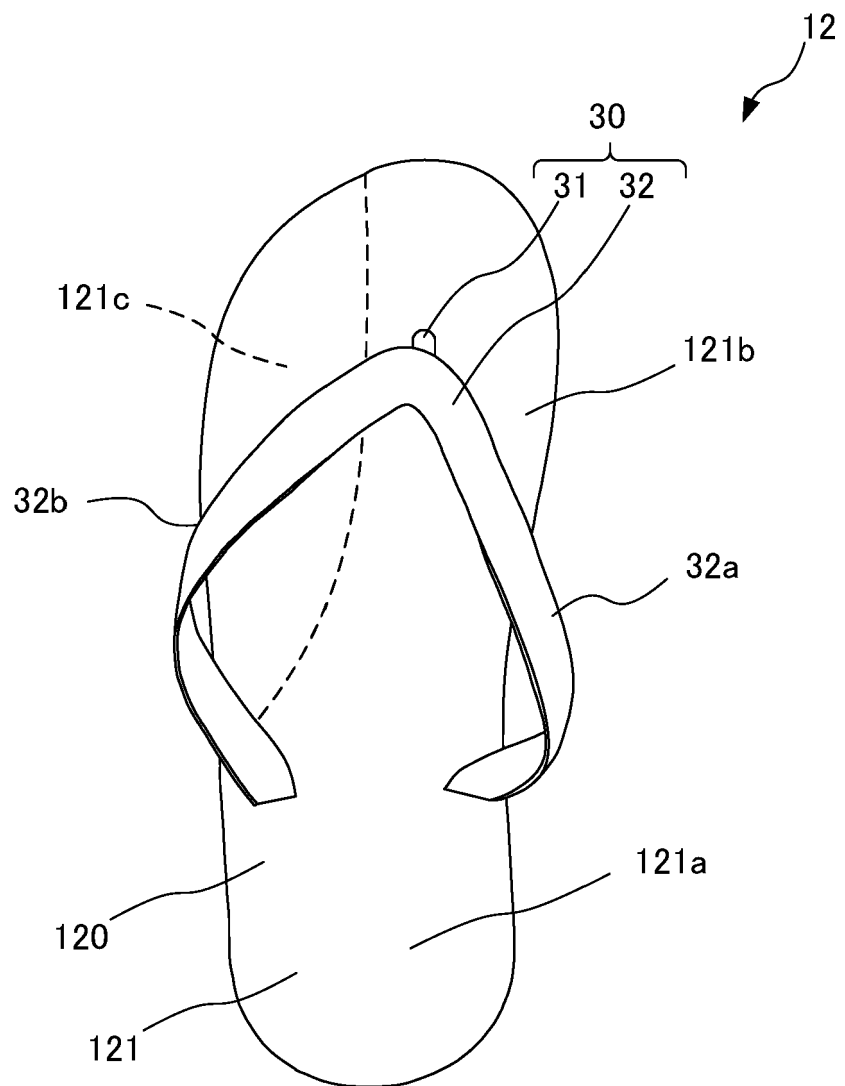


Fig. 15B

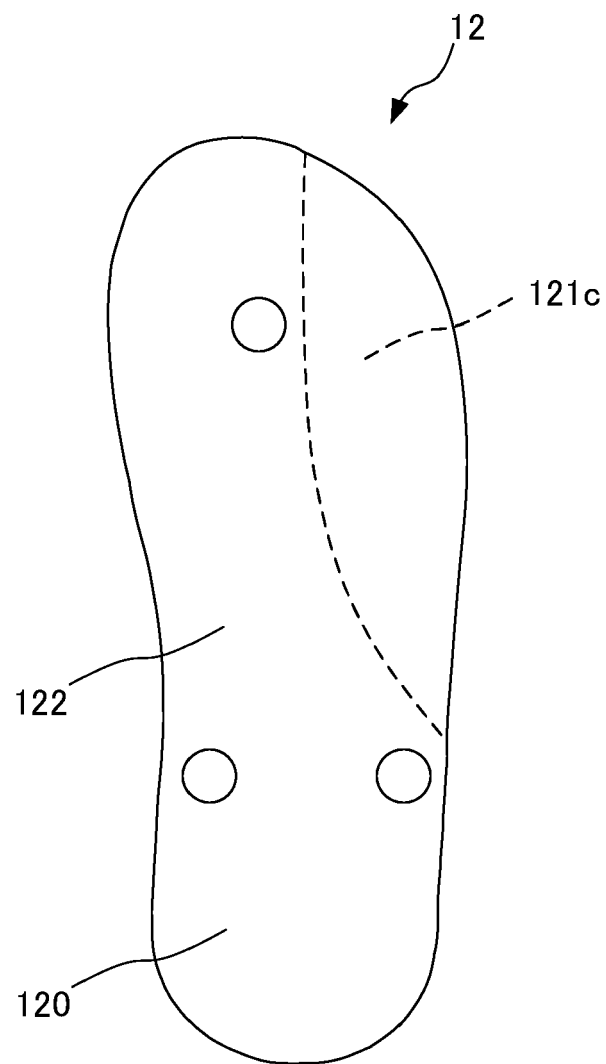


Fig. 15C

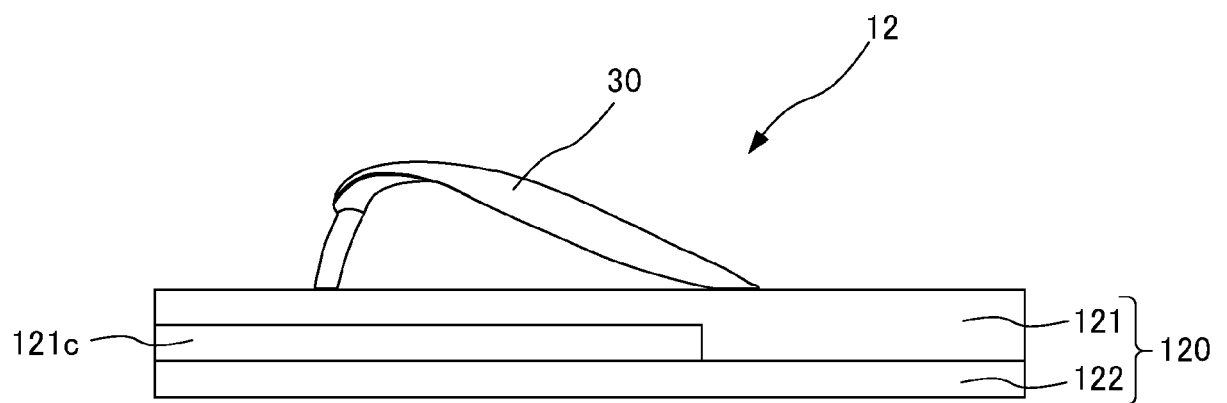


Fig. 16A

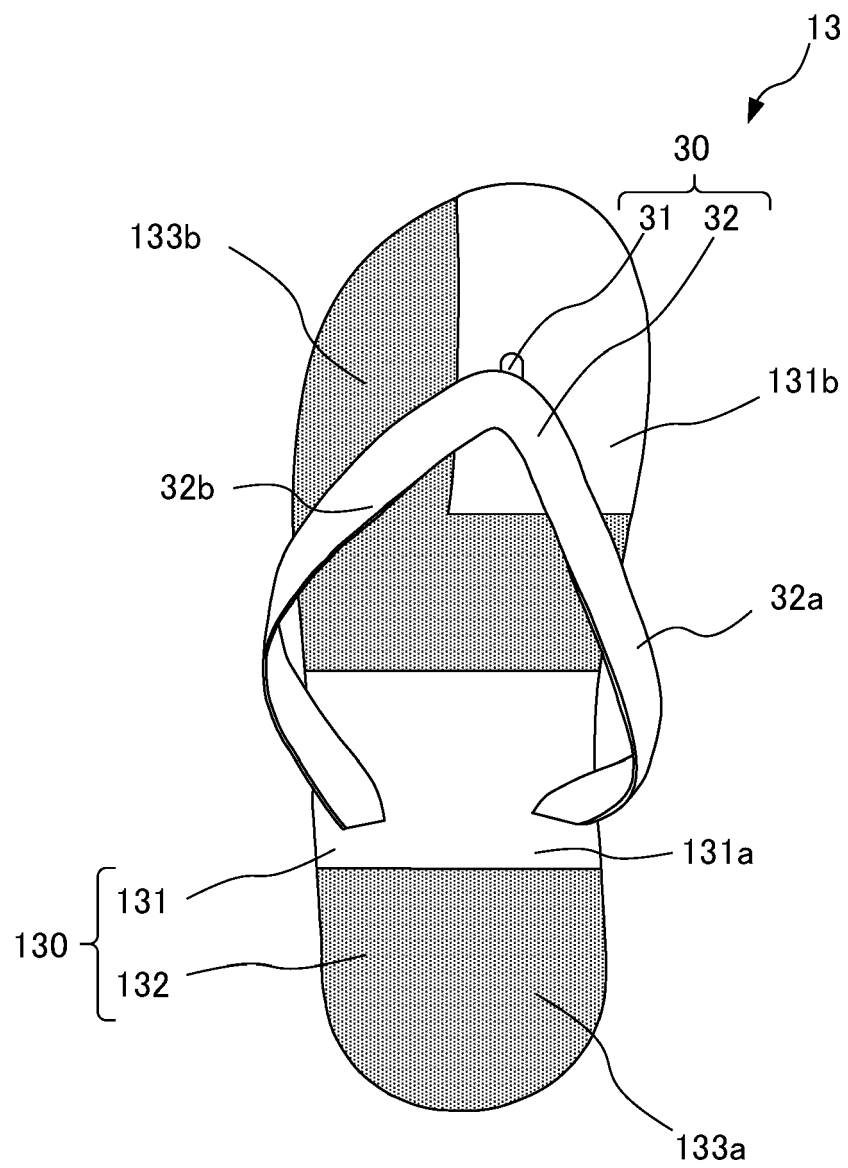


Fig. 16B

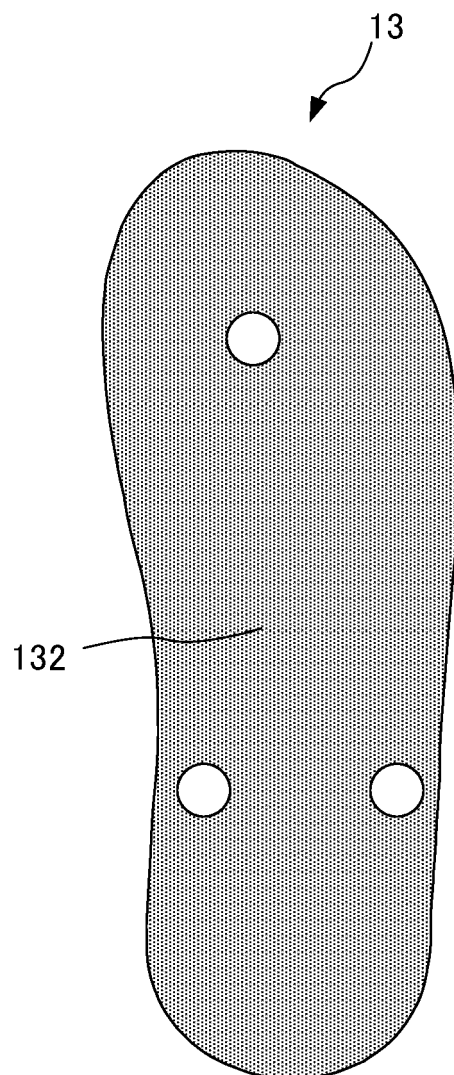


Fig. 16C

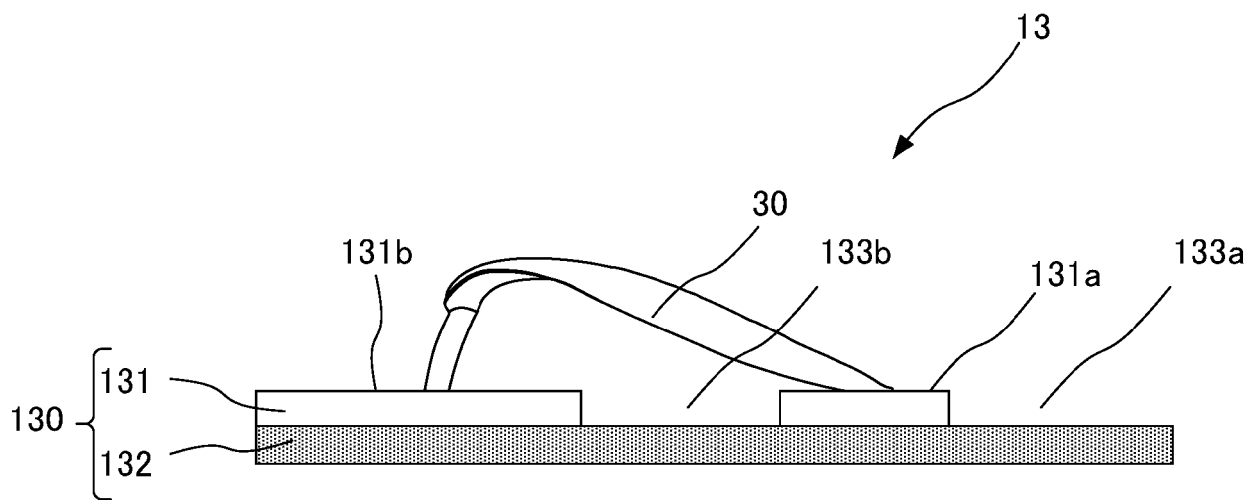


Fig. 16D

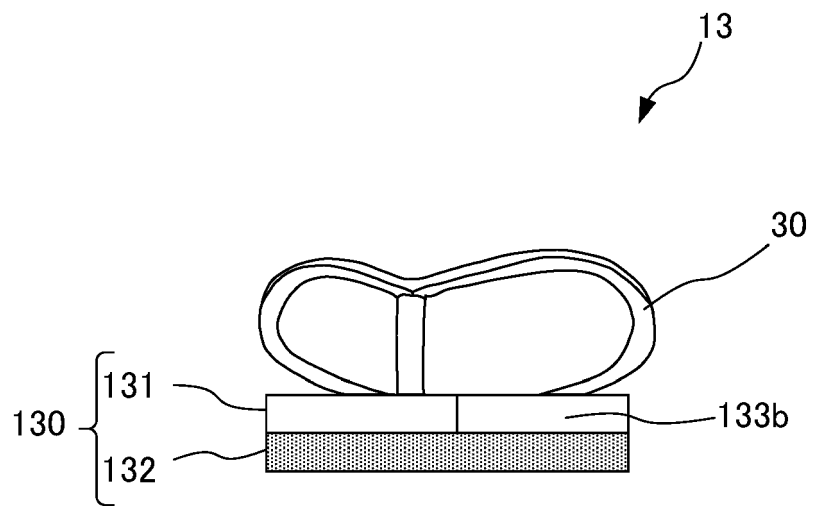


Fig. 17A

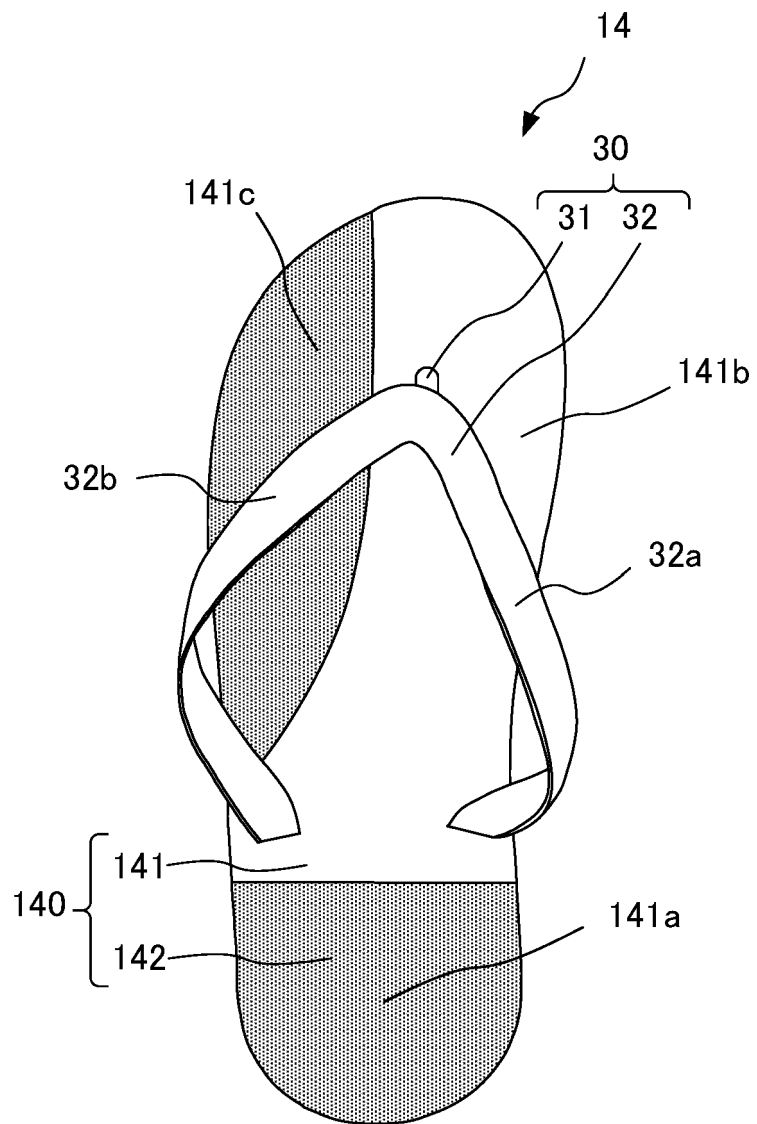


Fig. 17B

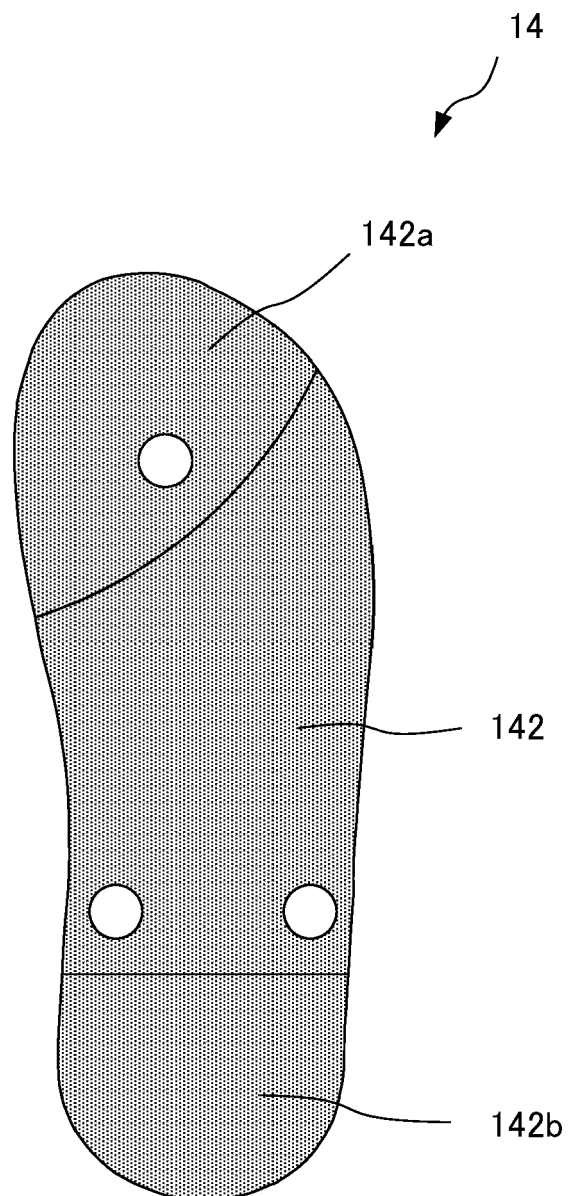


Fig. 17C

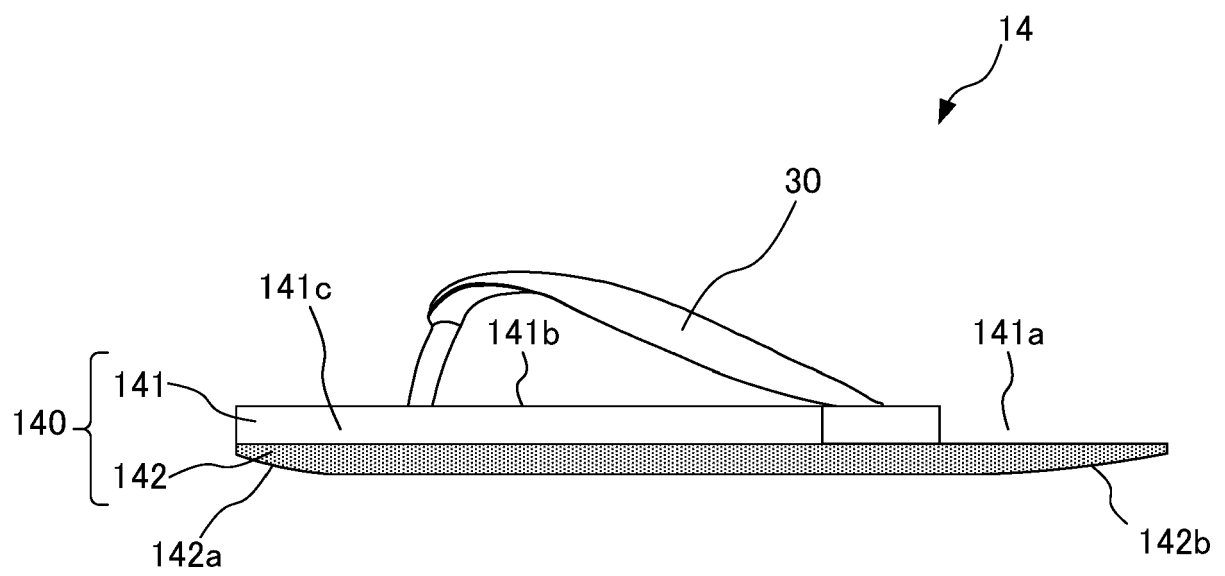


Fig. 17D

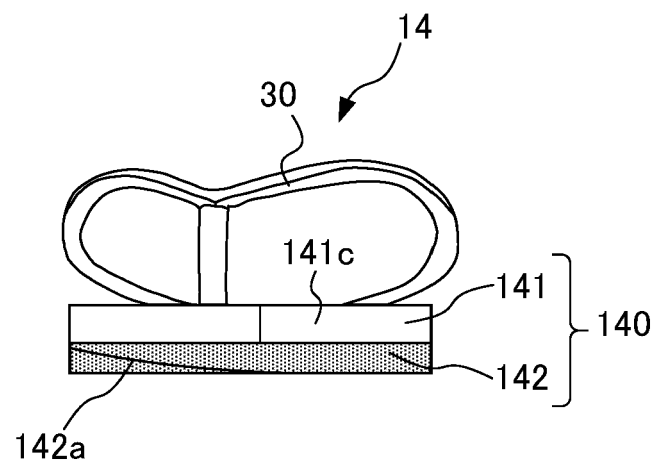


Fig. 18A

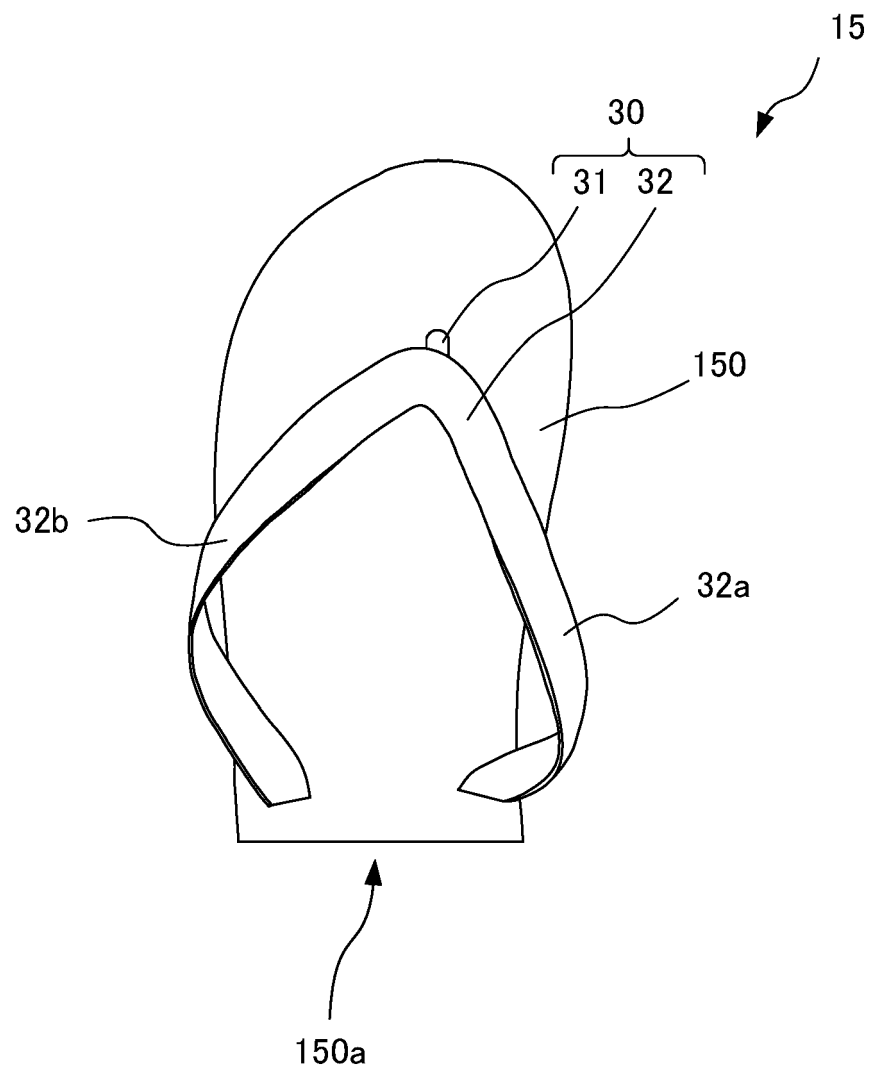


Fig. 18B

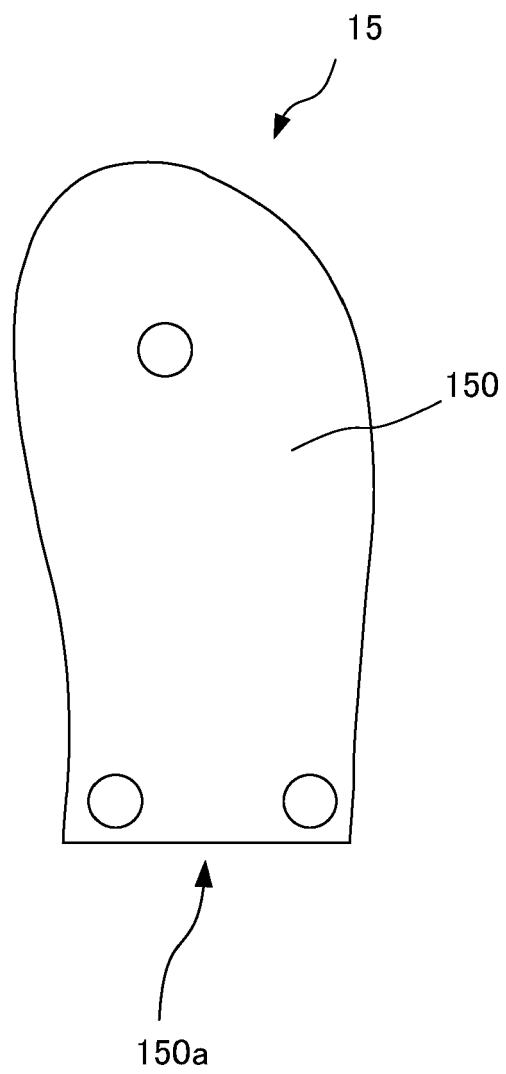


Fig. 18C

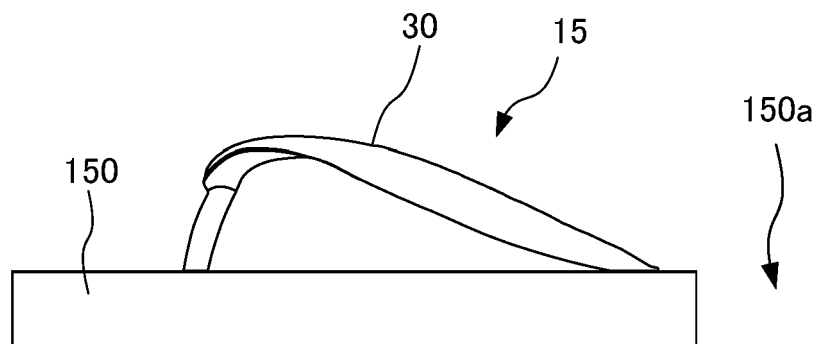


Fig. 19A

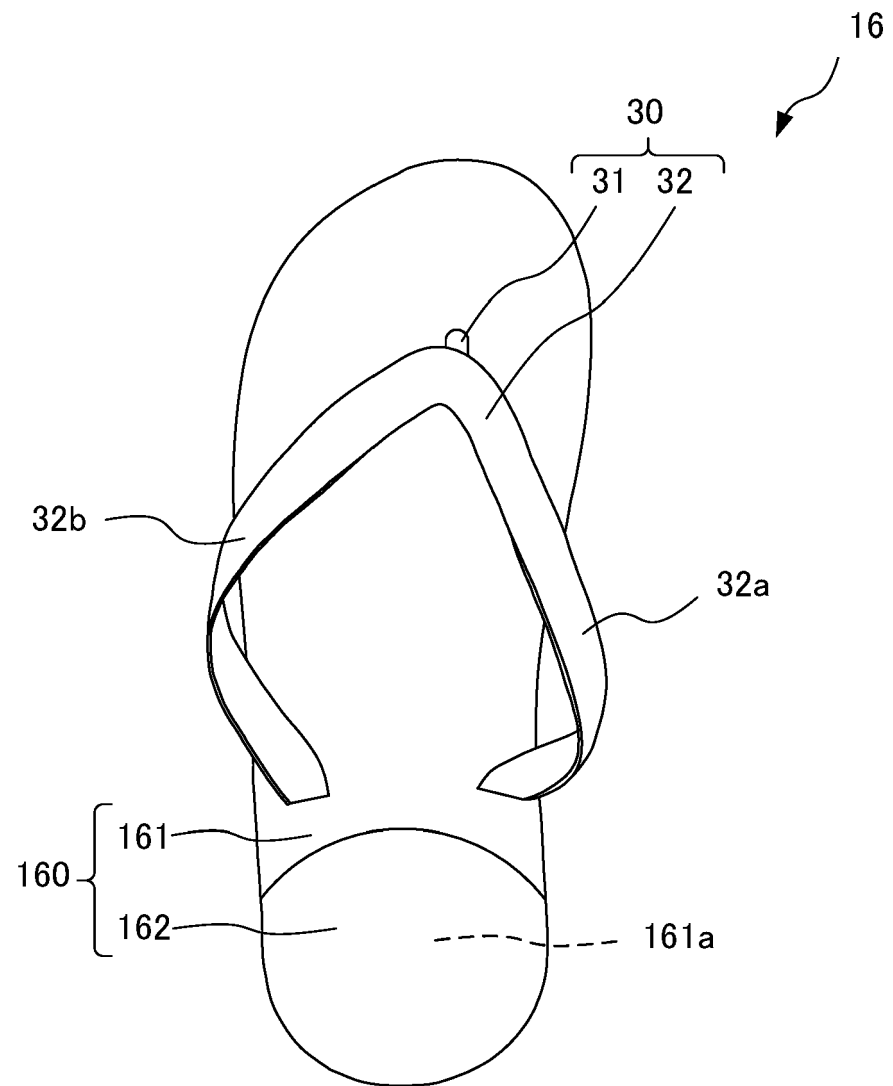


Fig. 19B

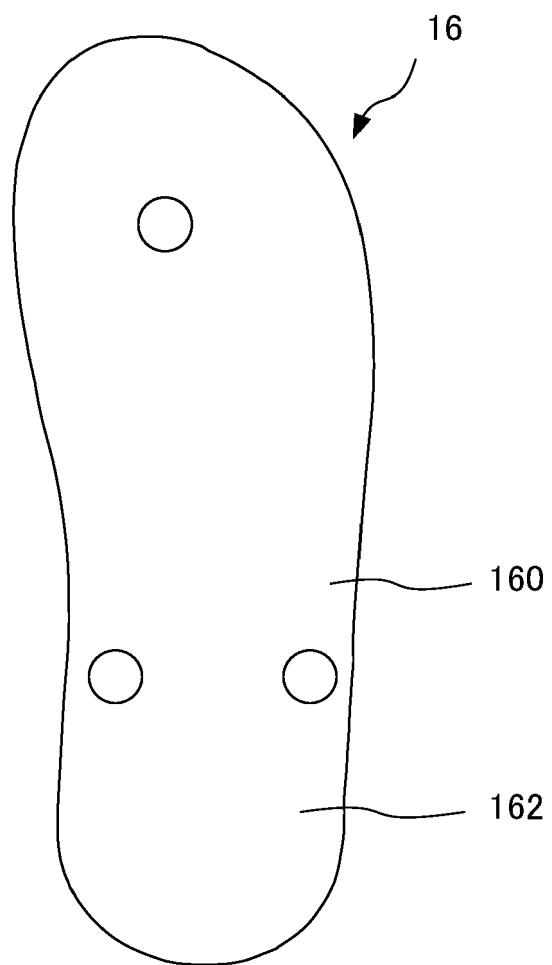


Fig. 19C

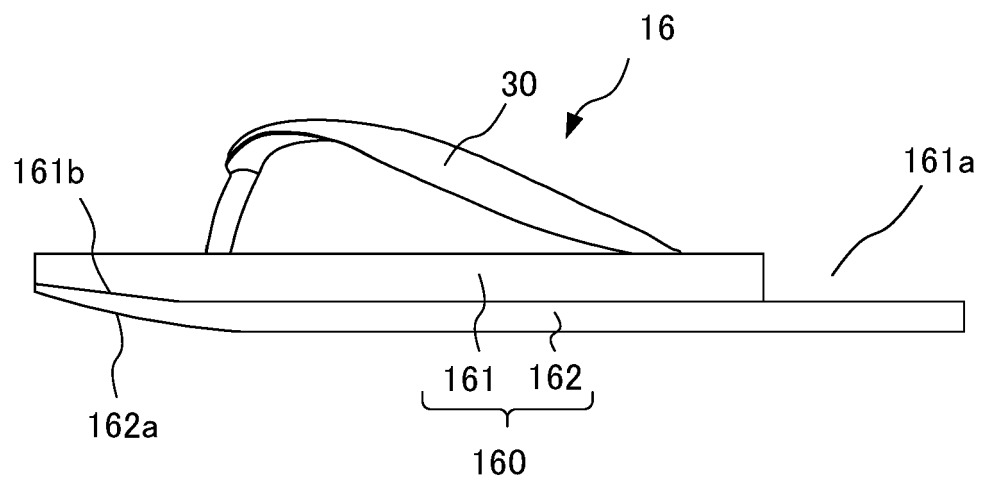
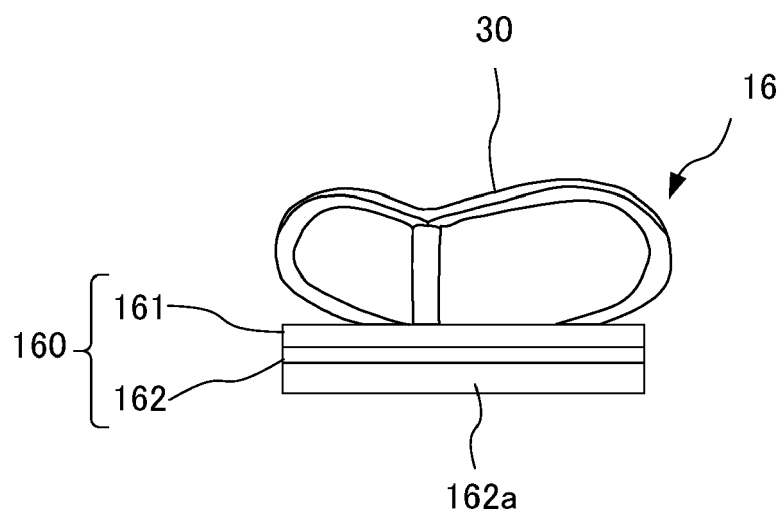


Fig. 19D





PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

EP 23 17 1355

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	JP 3 195381 U (IKIKIDO KK) 15 January 2015 (2015-01-15) * abstract * * paragraphs [0001] - [0040] * * figures 1-8 * * claims 1-5 *	8	INV. A43B3/10 A43B3/12 A43B7/1405 A43B7/1485
A	JP 2009 189804 A (URUSHIYAMA YOSHINORI) 27 August 2009 (2009-08-27) * abstract * * paragraphs [0001] - [0030] * * figures 1-10 * * claims 1-3 *	8	
			TECHNICAL FIELDS SEARCHED (IPC) A43B

INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

1

Place of search	Date of completion of the search	Examiner
The Hague	20 December 2023	Espeel, Els
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		

EPO FORM 1503 03/82 (P04E07)

INCOMPLETE SEARCH
SHEET C

Application Number

EP 23 17 1355

Claim(s) completely searchable:

8

Claim(s) not searched:

1-7, 9-19

Reason for the limitation of the search:

Claims 1, 2, 7-19 have been drafted as separate independent claims. Under Article 84 in combination with Rule 43(2) EPC, an application may contain more than one independent claim in a particular category only if the subject-matter claimed falls within one or more of the exceptional situations set out in paragraph (a), (b) or (c) of Rule 43(2) EPC. This is not the case in the present application.

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 23 17 1355

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-12-2023

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	JP 3195381	U	15-01-2015	NONE

15	JP 2009189804	A	27-08-2009	NONE

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25				
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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 3232282 U [0004]