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(54) Shoe with a shoe lace device that can be tightened to simulate a double-bow knot

(57) A shoe includes a shoe body 201 and a shoe lace device 100. The shoe body 201 has a pair of eyelet tabs 221. The shoe lace device 100 includes first, second, third, and fourth lace sections 11, 12, 13, 14, a clamp member 20, and a decorative knot 30. Lower ends 111, 121, 131, 141 of the first to fourth lace sections 11, 12, 13, 14 are anchored on the shoe body 201. The upper ends 112, 122 of the first and second lace sections 11, 12, and those of the third and fourth lace sections 13, 14, are interconnected to form first and second loops (I), (II), respectively. The clamp member 20 is sleeved slidably on medial portions 113, 123, 133, 143 of the lace sections 11, 12, 13, 14. The decorative knot 30 is secured on and is disposed externally of the clamp member 20, is disposed between the first and second loops (I), (II), and has a knot and two distal portions 32, 33. Downward and upward movements of the clamp member 20 along the lace sections 11, 12, 13, 14 permit the tightening and loosening of the shoe body 201.

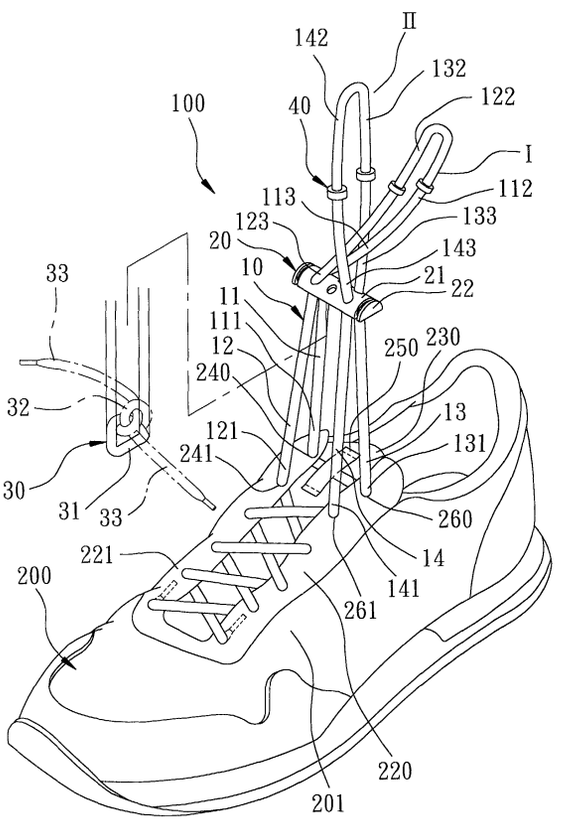

FIG. 3

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Description

[0001] The invention relates to a shoe, more particularly to a shoe having a shoe lace device that can be tightened to simulate a double-bow knot.

[0002] Referring to Figure 1, a conventional shoe 4 comprises a shoe body 41 and a shoe lace device 1. The shoe body 41 has a pair of eyelet tabs 5. The shoe lace device 1 includes a shoe lace 2 having first and second lace sections 201, 202, and a clamp member 3. The first lace section 201 is strung on the shoe body 41 so as to form a criss-cross pattern on the eyelet tabs 5. The second lace section 202 is formed as a simple loop, and has lower ends 2021 connected to the first lace section 201, thereby anchoring the lower ends 2021 on the eyelet tabs 5, respectively. The clamp member 3, as shown in Figure 2, includes an elongate casing 301, a clamping block 302, and a spring member 303. The elongate casing 301 is formed with a lateral open end 3010 for receiving the clamping block 302, a closed end 3011 opposite to the open end 3010, and a vertically extending hole unit 301' for extension of the lower ends 2021 of the second lace section 202 therethrough. The clamping block 302 is slidably received in the open end 3010 of the casing 301, and is formed with a vertically extending slot unit 3021 that corresponds to the hole unit 301' of the casing 301 for extension of the lower ends 2021 of the second lace section 202 therethrough. The spring member 303 is disposed in the casing 301, and has opposite ends that abut respectively against the clamping block 302 and the closed end 3011 of the casing 301. As such, the clamping block 302 is biased by the spring member 303 so as to misalign the slot unit 3021 from the hole unit 301' in order to clamp the second lace section 202 between the clamping block 302 and the casing 301.

[0003] To tighten the shoe 4, the clamp member 3 is forced to move downwardly along the second lace section 202, thereby bringing the lower ends 2021 of the second lace section 202 closer together.

[0004] To loosen the shoe 4, the clamping block 302 is operated to align the slot unit 3021 with the hole unit 301' against action of the spring member 303, and the clamp member 3 is then moved upwardly along the second lace section 202, thus permitting the lower ends 2021 of the second lace section 202 to move away from each.

[0005] Although the aforesaid shoe 4 has a shoe lace device 1 that is easy to use, the simple loop configuration of the second lace section 202 has an unattractive appearance.

[0006] Therefore, the main object of the present invention is to provide a shoe having a shoe lace device that can be tightened to simulate a double-bow knot.

[0007] Accordingly, a shoe of this invention comprises a shoe body and a shoe lace device. The shoe body has a pair of eyelet tabs . The shoe lace device includes : first, second, third, and fourth lace sections, each of which has a lower end and an upper end; a clamp member; and a decorative knot. The lower ends of the first to fourth lace sections are anchored on the shoe body. The upper ends of the first and second lace sections are interconnected to form a first loop. The upper ends of the third and fourth lace sections are interconnected to form a second loop. The clamp member is sleeved slidably on medial portions of the first to fourth lace sections. Downward movement of the clamp member along the first to fourth lace sections brings the lower ends of the first to fourth lace sections closer together for tightening the shoe body. Upward movement of the clamp member along the first to fourth lace sections permits the lower ends of the first to fourth lace sections to move away from each for loosening the shoe body. A decorative knot is secured on and is disposed externally of the clamp member, is disposed between the first and second loops, and has a knot portion and a pair of distal portions extending from the knot portion.

[0008] Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiments with reference to the accompanying drawings, of which:

Figure 1 is a perspective view of a conventional shoe;

Figure 2 is a cross-sectional view of a clamp member of a shoe lace device of the conventional shoe;

Figure 3 is a perspective view of the first preferred embodiment of a shoe according to the present invention;

Figure 4 is an exploded perspective view of a clamp member of a shoe lace device of the shoe according to the present invention;

Figure 5 is a perspective view illustrating how upward movement of the clamp member permits lower ends of lace sections to move away from each so as to loosen the shoe;

Figure 6 is a cross sectional view illustrating how the lower ends of the lace sections are clamped by the clamp member to tighten the shoe;

Figure 7 is a cross sectional view showing how the shoe body is tightened upon pulling apart a pair of loops;

Figure 8 is a perspective view showing the shoe of the first preferred embodiment;

Figure 9 is a perspective view illustrating the second preferred embodiment of a shoe according to the present invention;

Figure 10 is a partly exploded perspective view illustrating the third preferred embodiment of a shoe according to the present invention;

Figure 11 is a perspective view of a shoe lace device of the fourth preferred embodiment of a shoe according to the present invention;

Figure 12 is an exploded perspective view of a clamp member of the shoe lace device of Figure 11;

Figure 13 is a perspective view showing the fourth

preferred embodiment in a tightened state;

Figure 14 is a fragmentary cross-sectional view showing how the fourth preferred embodiment is tightened upon pulling apart a pair of loops; and

Figure 15 is a fragmentary cross-sectional view illustrating how movement of the clamp member permits loosening of the fourth preferred embodiment.

[0009] Before the present invention is described in greater detail, it should be noted that like elements are denoted by the same reference numerals throughout the disclosure.

[0010] Referring to Figure 3, the first preferred embodiment of a shoe 200 according to the present invention is shown to comprise a shoe body 201 and a shoe lace device 100. The shoe body 201 has a pair of eyelet tabs 221, 220, and a tongue 230. A retainer 250 is sewn on the tongue 230. The shoe lace device 100 includes a shoe lace 10, a clamp member 20, and a decorative knot 30. The shoe lace 10 has a first lace segment that is strung on the shoe body 201 in a conventional manner so as to form a criss-cross pattern on the eyelet tabs 221, 220; and a second lace segment that includes first, second, third, and fourth lace sections 11, 12, 13, 14, each of which has a lower end and an upper end. The first lace segment has distal ends concealed by the eyelet tabs 221, 220. The lower ends 111, 121, 131, 141 of the first to fourth lace sections 11, 12, 13, 14 are anchored on the shoe body 201 in a manner to be described hereinafter. The upper ends 112, 122 of the first and second lace sections 11, 12 are interconnected to form a first loop (I) . The upper ends 132, 142 of the third and fourth lace sections 13, 14 are interconnected to form a second loop (II). One of the first and second loops (I), (II) extends through the other of the first and second loops (I), (II) . Furthermore, stop rings 40 are sleeved fittingly on the upper ends 112, 122, 132, 142 of the first to fourth lace sections 11, 12, 13, 14, respectively.

[0011] The clamp member 20 is sleeved slidably on medial portions 113, 123, 133, 143 of the first to fourth lace sections 11, 12, 13, 14. As shown in Figure 4, the clamp member 20 includes an elongate casing 21, a pair of clamping blocks 22, and a biasing member 23. The elongate casing 21 has opposite lateral open end portions 213 that are spaced apart from each other in a first direction. Each of the open end portions 213 of the casing 21 has an end face 2131, and is formed with a pair of vertically extending hole units 214, 215 that are arranged in a second direction transverse to the first direction and that permit extension of the medial portions 113, 123, 133, 143 of a respective set of the first and second lace sections 11, 12, and third and fourth lace sections 13, 14 therethrough. The casing 21 includes a lower base plate 211, and a curved upper cover plate 212 connected to the lower base plate 211. Each of the hole units 215, 214 includes an upper hole part 215 formed in the upper cover plate 212, and a lower hole part 214 formed in the lower base plate 211. The lower hole part 214 is disposed closer to the end face 2131 of the respective one of the open end portions 213 than the upper hole part 215, as best illustrated in Figures 6 and 7. Moreover, two vertically extending holes 216 are formed between the open end portions 213 of the casing 21.

[0012] The clamping blocks 22 are slidably and respectively received in the open end portions 213 of the casing 21, and are each formed with a pair of vertically extending slot units 223 that correspond respectively to the pair of the hole units 214, 215 in the respective one of the open end portions 213 of the casing 21 for extension of the medial portions 113, 123, 133, 143 of the respective pair of the first and second lace sections 11, 12, and third and fourth lace sections 13, 14.

[0013] The biasing member 23, in the form of a coil spring, is disposed in the casing 21 and has opposite ends 231 that abut respectively against the clamping blocks 22 for biasing the clamping blocks 22 outwardly of the open end portions 213 of the casing 21. As such, the clamping blocks 22 are biased by the biasing member 23 so as to misalign the slot units 223 from the hole units 214, 215, in order to clamp the medial portions 113, 123, 133, 143 of the first to fourth lace sections 11, 12, 13, 14 between the clamping blocks 22 and the casing 21. Downward movement of the clamp member 20 along the first to fourth lace sections 11, 12, 13, 14 brings the lower ends 111, 121, 131, 141 of the first to fourth lace sections 11, 12, 13, 14 closer together for tightening the shoe body 201, as shown in Figures 7 and 8. Upward movement of the clamp member 20 along the first to fourth lace sections 11, 12, 13, 14 permits the lower ends 111, 121, 131, 141 of the first to fourth lace sections 11, 12, 13, 14 to move away from each other for loosening the shoe body 201, as shown in Figure 5.

[0014] The decorative knot 30 is secured on and is disposed externally of the clamp member 20, and is further disposed between the first and second loops (I), (II). The decorative knot 30 has a U-shaped retaining portion 31, a knot portion 32, and a pair of distal portions 33. The retaining portion 31 has segments that extend through the holes 216 in the casing 21 so as to secure the same to the casing 21. The knot portion 32 is connected to the retaining portion 31, and is disposed externally of the casing 21. Each of the distal portions 33 extends from the knot portion 32. The medial portions 113, 123, 133, 143 of the first to fourth lace sections 11, 12, 13, 14 further extend between the casing 21 and the knot portion 32.

[0015] In use, by pulling apart the first and second loops (I), (II), the clamp member 20 will be forced to slide downwardly along the lace sections 11, 12, 13, 14, and the lower ends 111, 121, 131, 141 of the latter will be brought closer together at the same time for tightening the shoe 200. To loosen the shoe 200, the clamping blocks 22 are operated to compress the biasing member 23, thereby aligning the slot units 223 with the hole units 214, 215. At this time, by moving the clamp member 20

upwardly along the lace sections 11, 12, 13, 14, the lower ends 111, 121, 131, 141 of the latter can move away from each for loosening the shoe 200.

[0016] Therefore, the shoe 200 is not only easy to wear and remove, but also has an attractive appearance in view of the double-bow configuration of the shoe lace device 100.

[0017] In the first preferred embodiment, the lower ends 121, 141 of the second and fourth lace sections 12, 14 are connected to the first lace segment at two of the eyelets 241, 261 in the eyelet tabs 221, 220. The lower end 111 of the first lace section 11 extends through an eyelet 240 of the left eyelet tab 221, passes through the retainer 250 on the tongue 230, and crosses to the right eyelet tab 220 to connect with the lower end 131 of the third lace section 13.

[0018] Figure 9 illustrates the second preferred embodiment of a shoe 200 according to the present invention. Unlike the first preferred embodiment, a positioning knot 251 having opposite ends is tied on the retainer 250 of the tongue 230 and interconnects the lower ends 111, 131 of the first and third lace sections 11, 13.

[0019] The shoe 200 of the second preferred embodiment operates in a manner substantially similar to that of the first preferred embodiment. In this embodiment, the shoe lace device 100 can be effectively tightened due to the presence of the positioning knot 251 on the retainer 250.

[0020] Referring to Figure 10, the third preferred embodiment of a shoe 200 according to the present invention is shown to be substantially similar to the previous preferred embodiments. However, unlike the previous embodiments, the shoe lace device 100 further includes a pair of hook members 50, 51. The first hook member 50 is used to secure removably the lower end 111 of the first lace section 11 onto the eyelet tab 221 of the shoe body 201 at one of the eyelets 240. The second hook member 51 is used to secure removably the lower end 131 of the third lace section 13 onto the eyelet tab 220 of the shoe body 201 at one of the eyelets 260.

[0021] Referring to Figure 11, the first preferred embodiment of a double-bow shoe lace device 100 according to the present invention is shown to be adapted for use with a shoe 200 having first and second eyelet tabs 220, 230. The shoe lace device 100 comprises a shoe lace 15, a clamp member 10, and a decorative knot 14. The shoe lace 15 has a first lace segment that is strung on the shoe body 201 in a conventional manner so as to form a criss-cross pattern on the eyelet tabs 220, 230, and a second lace segment that includes first, second, third, fourth, fifth and sixth lace sections 20, 30, 40, 50, 60, 70. The first lace segment has distal ends 151 concealed by the eyelet tabs 220, 230. Each of the six lace sections 20, 30, 40, 50, 60, 70 has a lower end 21, 31, 41, 51, 61, 71, and an upper end 22, 32, 42, 52, 62, 72. The lower ends 21, 31 of the first and second lace sections 20, 30 are adapted to be anchored respectively on first and second eyelets 240, 250 of the first eyelet tab 220. The lower ends 41, 51 of the third and fourth lace sections 40, 50 are formed with a respective knot 411, 511 that is adapted to engage first and second eyelets 260, 270 of the second eyelet tab 230, respectively, thereby anchoring the lower ends 41, 51 on the second eyelet tab 230. The upper ends 22, 32 of the first and second lace sections 20, 30 are interconnected to form a first loop (I) . The upper ends 62, 72 of the fifth and sixth lace sections 60, 70 are interconnected to form a second loop (II). In this embodiment, the lower ends 21, 41 of the first and third lace sections 20,40 are connected to the first lace segment. The lower ends 31, 51 of the second and fourth lace sections 30, 50 are connected to each other.

[0022] The clamp member 10 is sleeved slidably on medial portions 23, 33 of the first and second lace sections 20, 30 between the upper and lower ends 22, 32, 21, 31 of the first and second lace sections 20, 30. With further reference to Figure 12, the clamp member 10 includes an elongate casing 11, a clamping block 12, and a biasing member 13. The elongate casing 11 has a lateral open end portion 113, and a closed end portion 111 opposite to the open end portion 113, and includes a lower base plate 114 and an upper cover plate 112 opposite to the lower base plate 114. The upper cover plate 112 is formed with an aperture 118, and has a positioning rib 119 that extends across the aperture 118. The lower base plate 114 is formed with a pair of first lace holes 115, a pair of second lace holes 116, and a pair of third lace holes 117. The positioning rib 119 is formed with a pair of fourth lace holes 1191 that correspond to the third lace holes 117. The medial portions 23, 33 of the first and second lace sections 20, 30 extend through the first lace holes 115 and the aperture 118. The upper ends 42, 52 of the third and fourth lace sections 40, 50 extend through the second lace holes 116 and are formed with a respective knot 421, 521 disposed in the casing 11, thereby anchoring the upper ends 42, 52 of the third and fourth lace sections 40, 50 on the clamp member 10. The lower ends 61, 71 of the fifth and sixth lace sections 60, 70 extend through the aperture 118 to connect with the upper ends 42 , 52 of the third and fourth lace sections 40, 50, respectively, thereby anchoring the lower ends 61, 71 of the fifth and sixth lace sections 60, 70 on the clamp member 10. The clamping block 12 is slidably received in the open end portion 113 of the casing 11, and is formed with a pair of vertically extending slot units 123 that correspond to the first lace holes 115 in the lower base plate 114 of the casing 11 for extension of the medial portions 23, 33 of the first and second lace sections 20, 30 therethrough. The biasing member 13, in the form of a coil spring, is disposed in the casing 11, has opposite ends 131 that abut respectively against the clamping block 12 and the closed end portion 111 of the casing 11, and biases the clamping block 12 outwardly of the open end portion 113 of the casing 11, thereby clamping the medial portions 23, 33 of the first and second lace sections 20, 30 between

the clamping block 12 and the casing 11, as best shown in Figure 14.

[0023] In the present embodiment, the knots 421, 521, 411, 511 of the upper and lower ends 42, 52, 41, 51 of each of the third and fourth lace sections 40, 50 cooperate to limit a maximum distance of the clamp member 10 from the second eyelet tab 230. One of the first and second loops (I), (II) extends through the other of the first and second loops (I), (II) below the positioning rib 119.

[0024] The decorative knot 14 is secured on and is disposed externally of the clamp member 10 between the first and second loops (I), (II). Referring once again to Figure 11, the decorative knot 14 has a knot portion 142, a pair of distal portions 143 extending from the knot portion 142, and a pair of retaining legs 141. The knot portion 142 is disposed on the positioning rib 119 of the upper cover plate 112. The retaining legs 141 have upper ends 1412 connected to the knot portion 142, and lower ends 1411 that extend through the third and fourth lace holes 117, 1191. A bridging leg 1413 interconnects the lower ends 1411 below the lower base plate 114.

[0025] In use, when the first loop (I) is pulled toward the positioning rib 119, the clamp member 10 will be pushed to slide downwardly along the medial portions 23, 33 of the first and second lace sections 20, 30 to bring the lower ends 21, 31, 41, 51 of the first to fourth lace sections 20, 30, 40, 50 and thus the first and second eyelet tabs 220, 230 closer together for tightening the shoe 200, as illustrated in Figures 13 to 15. To loosen the shoe 200, the clamping block 12 is operated to compress the biasing member 13, thereby aligning the slot units 123 with the first lace holes 115, as best shown in Figure 15. At this time, the clamp member 10 can be slid upwardly along the medial portions 23, 33 of the first and second lace sections 20, 30, thereby permitting the lower ends 21, 31 of the first and second lace sections 20, 30 to move away from each other for loosening the shoe 200.

[0026] It should be noted that the eyelets through which the first and third lace sections 20, 40 and the second and fourth lace sections 30, 50 extend can be formed to be spaced farther apart, so that the lengths of the third and fourth lace sections 40, 50 can be increased, thereby allowing greater movement of the clamp member 10 to facilitate the easy wearing and removal of the shoe 200. Alternatively, a pair of hitch members (not shown) could be used instead of the eyelets 260, 270 to anchor removably the lower ends 41, 51 of the third and fourth lace sections 40, 50 onto the eyelet tab 230 of the shoe 200 to facilitate easy wearing and removal of the shoe 200.

Claims

1. A shoe **characterized by**:

a shoe body (201) having a pair of eyelet tabs (221, 220) ; and

a shoe lace device (100) including

first, second, third and fourth lace sections (11, 12, 13, 14), each of which has a lower end (111, 121, 131, 141) and an upper end (112, 122, 132, 142),

said lower ends (111, 121, 131, 141) of said first to fourth lace sections (11, 12, 13, 14) being anchored on said shoe body (201),

said upper ends (112, 122) of said first and second lace sections (11, 12) being interconnected to form a first loop (I),

said upper ends (132, 142) of said third and fourth lace sections (13, 14) being interconnected to form a second loop (II),

a clamp member (20) sleeved slidably on medial portions (113, 123, 133, 143) of said first to fourth lace sections (11, 12, 13, 14),

downward movement of said clamp member (20) along said first to fourth lace sections (11, 12, 13, 14) bringing said lower ends (111, 121, 131, 141) of said first to fourth lace sections (11, 12, 13, 14) closer together for tightening said shoe body (201), upward movement of said clamp member (20) along said first to fourth lace sections (11, 12, 13, 14) permitting said lower ends (111, 121, 131, 141) of said first to fourth lace sections (11, 12, 13, 14) to move away from each for loosening said shoe body (201), and

a decorative knot (30) secured on and disposed externally of said clamp member (20), said decorative knot (30) being disposed between said first and second loops (I), (II), and having a knot portion (32) and a pair of distal portions (33) extending from said knot portion (32).

2. The shoe of Claim 1, **characterized in that** said clamp member (20) includes:

an elongate casing (21) with opposite lateral open end portions (213) that are spaced apart from each other in a first direction, each of said open end portions (213) being formed with a pair of vertically extending hole units (214, 215) that are arranged in a second direction transverse to the first direction and that permit extension of said medial portions (113, 123, 133, 143) of a respective pair of said first and second lace sections (11, 12) and said third and fourth lace sections (13, 14) therethrough;

a pair of clamping blocks (22) slidably and respectively received in said open end portions (213) of said casing (21), each of said clamping

blocks (22) being formed with a pair of vertically extending slot units (223) that correspond respectively to said pair of said hole units (214, 215) in the respective one of said open end portions (213) of said casing (21) for extension of said medial portions (113, 123, 133, 143) of the respective pair of said first and second lace sections (11, 12) and said third and fourth lace sections (13, 14) ; and

a biasing member (23) disposed in said casing (21) and having opposite ends (231) that abut respectively against said clamping blocks (22) for biasing said clamping blocks (22) outwardly of said open end portions (213) of said casing (21), thereby clamping said medial portions (113, 123, 133, 143) of said first to fourth lace sections (11, 12, 13, 14) between said clamping blocks (22) and said casing (21).

3. The shoe of Claim 2, further **characterized in that** said decorative knot (30) further has a retaining portion (31) secured to said casing (21), said knot portion (32) being connected to said retaining portion (31) and being disposed externally of said casing (21), said medial portions (113, 123, 133, 143) of said first to fourth lace sections (11, 12, 13, 14) further extending between said casing (21) and said knot portion (32).

4. The shoe of Claim 1, **characterized in that** one of said first and second loops (I), (II) extends through the other of said first and second loops (I), (II).

5. The shoe of Claim 1, **characterized in that** said shoe lace device (100) further includes a first hook member (50) secured to said lower end (111, 121) of one of said first and second lace sections (11, 12), and a second hook member (51) secured to said lower end (131, 141) of one of said third and fourth lace sections (13, 14), said first and second hook members (50, 51) hooking removably onto said eyelet tabs (220, 221) of said shoe body (201), respectively.

6. A double-bow shoe lace device for a shoe having first and second eyelet tabs 221, 220, said shoe lace device **characterized by**:

first, second, third, fourth, fifth and sixth lace sections (1520, 1530, 1540, 1550, 1560, 1570), each of which has a lower end (1521, 1531, 1541, 1551, 1561, 1571) and an upper end (1522, 1532, 1542, 1552, 1562, 1572) ;

said lower ends (1521, 1531) of said first and second lace sections (1520, 1530) being adapted to be anchored on the first eyelet tab (221);

said lower ends (1541, 1551) of said third and fourth lace sections (1540, 1550) being adapted to be anchored on the second eyelet tab (220);

said upper ends (1522, 1532) of said first and second lace sections (1520, 1530) being interconnected to form a first loop (I) ;

said upper ends (1562, 1572) of said fifth and sixth lace sections (1560, 1570) being interconnected to form a second loop (II);

a clamp member (20a) sleeved slidably on medial portions (1523, 1533) of said first and second lace sections (1520, 1530) between said upper and lower ends (1522, 1532, 1521, 1531) of said first and second lace sections (1520, 1530);

said upper end (1542, 1552) of at least one of said third and fourth lace sections (1540, 1550) being anchored on said clamp member (20a) ;

said lower ends (1561, 1571) of said fifth and sixth lace sections (1560, 1570) being anchored on said clamp member (20a); and

a decorative knot (30a) secured on and disposed externally of said clamp member (20a), said decorative knot (30a) being disposed between said first and second loops (I), (II), and having a knot portion (32a) and a pair of distal portions (33a) extending from said knot portion (32a).

7. The double-bow shoe lace device of Claim 6, further **characterized in that** said clamp member (20a) includes:

an elongate casing (21a) with a lateral open end portion (213a), and a closed end portion (211a) opposite to said open end portion (213a), said casing (21a) including a lower base plate (214a), and an upper cover plate (212a) opposite to said lower base plate (214a), said upper cover plate (212a) being formed with an aperture (218a), said lower base plate (214a) being formed with a pair of first lace holes (215a) and a pair of second lace holes (216a), said medial portions (1523, 1533) of said first and second lace sections (1520, 1530) extending through said first lace holes (215a) and said aperture (218a), said upper ends (1542, 1552) of said third and fourth lace sections (1540, 1550) extending through said second lace holes (216a) such that said knots (421, 521) thereof are disposed in said casing (21a), said lower ends (1561, 1571) of said fifth and sixth lace sections (1560, 1570) extending through said aperture (218a) to connect with said upper ends (1542, 1552) of said third and fourth lace sections (1540, 1550) ;

a clamping block (22a) slidably received in said open endportion (213a) of said casing (21a), and formedwith a pair of vertically extending

slot units (223a) that correspond to said first lace holes (215a) in said casing (21a) for extension of said medial portions (1523, 1533) of said first and second lace sections (1520, 1530) therethrough; and

a biasing member (23a) disposed in said casing (21a) and having opposite ends (231a) that abut respectively against said clamping block (22a) and said closed end portion (211a) of said casing (21a) for biasing said clamping block (22a) outwardly of said open end portion (213a) of said casing (21a), thereby clamping said medial portions (1523, 1533) of said first and second lace sections (1520, 1530) between said clamping block (22a) and said casing (21a).

8. The double-bow shoe lace device of Claim 7, further **characterized in that**:

said lower base plate (214a) further has a pair of third lace holes (217a) ;

said upper cover plate (212a) having a positioning rib (219a) that extends across said aperture (218a) and that is formed with a pair of fourth lace holes (2191) corresponding to said third lace holes (217a);

said knot portion (32a) being disposed above said upper cover plate (212a), said decorative knot (30a) further having a pair of retaining legs (341a) with upper ends (341b) connected to said knot portion (32a) and lower ends (341c) that extend through said third and fourth lace holes (217a, 2191), and a bridging leg (3413) that interconnects said lower ends (341c) of said retaining legs (341a) below said lower base plate (214a).

9. The double-bow shoe lace device of Claim 8, further **characterized in that** one of said first and second loops (I), (II) extends through the other of said first and secondloops (I) , (II) below said positioning rib (219a) .

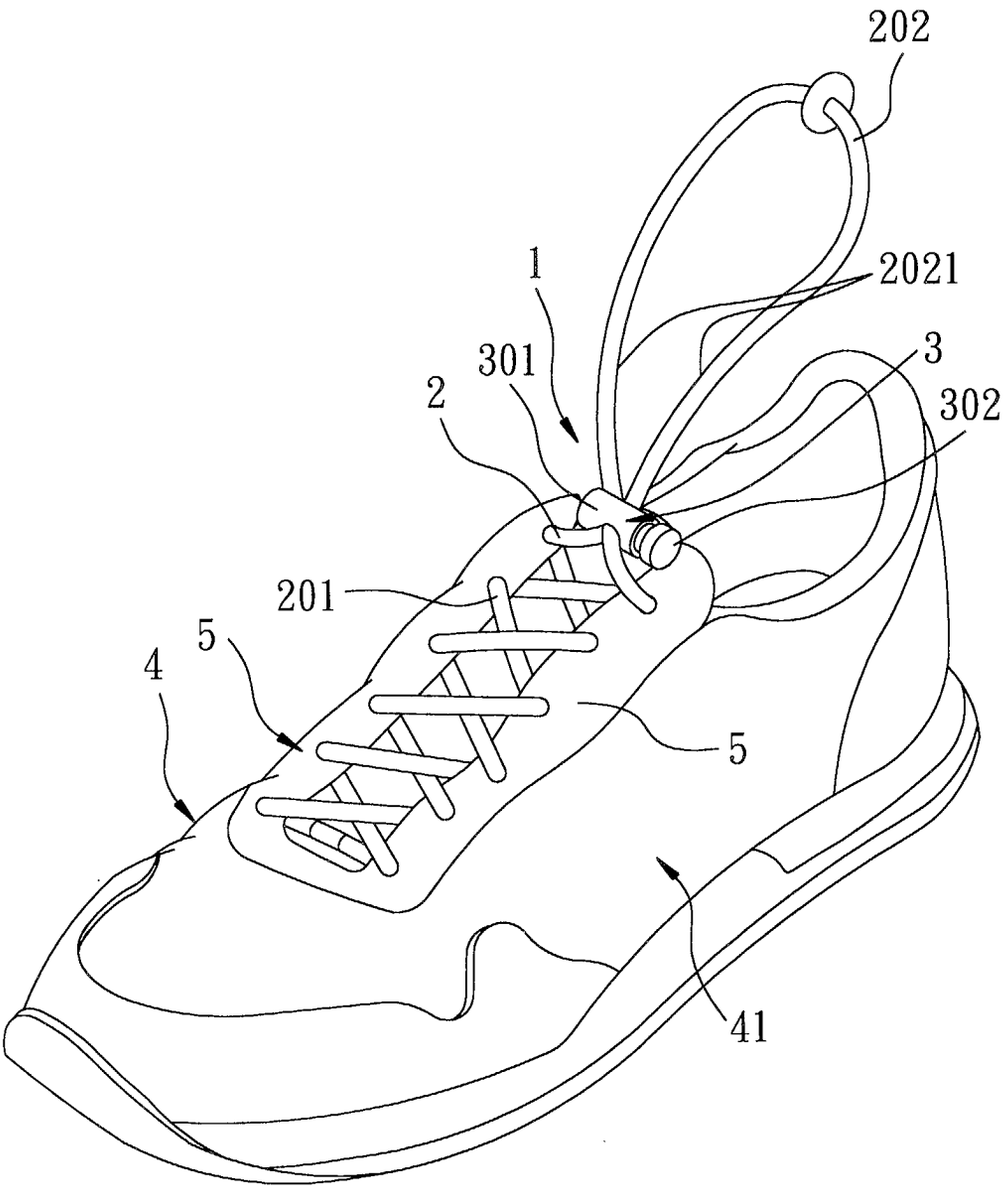

FIG. 1

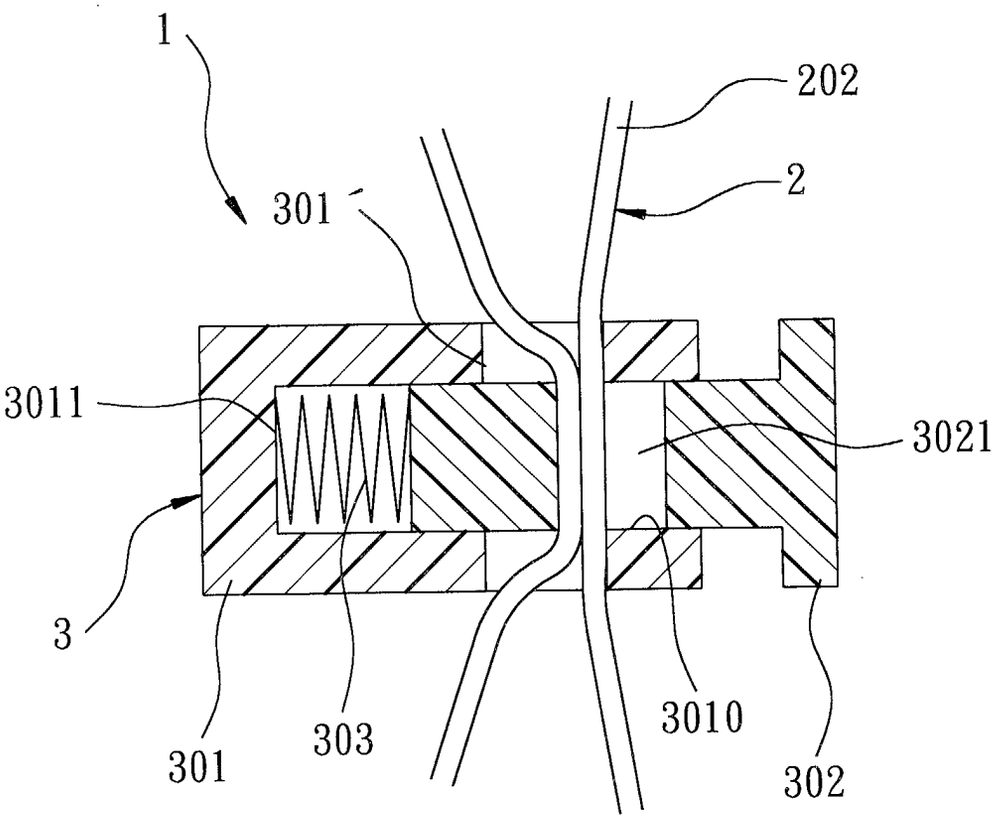

FIG. 2

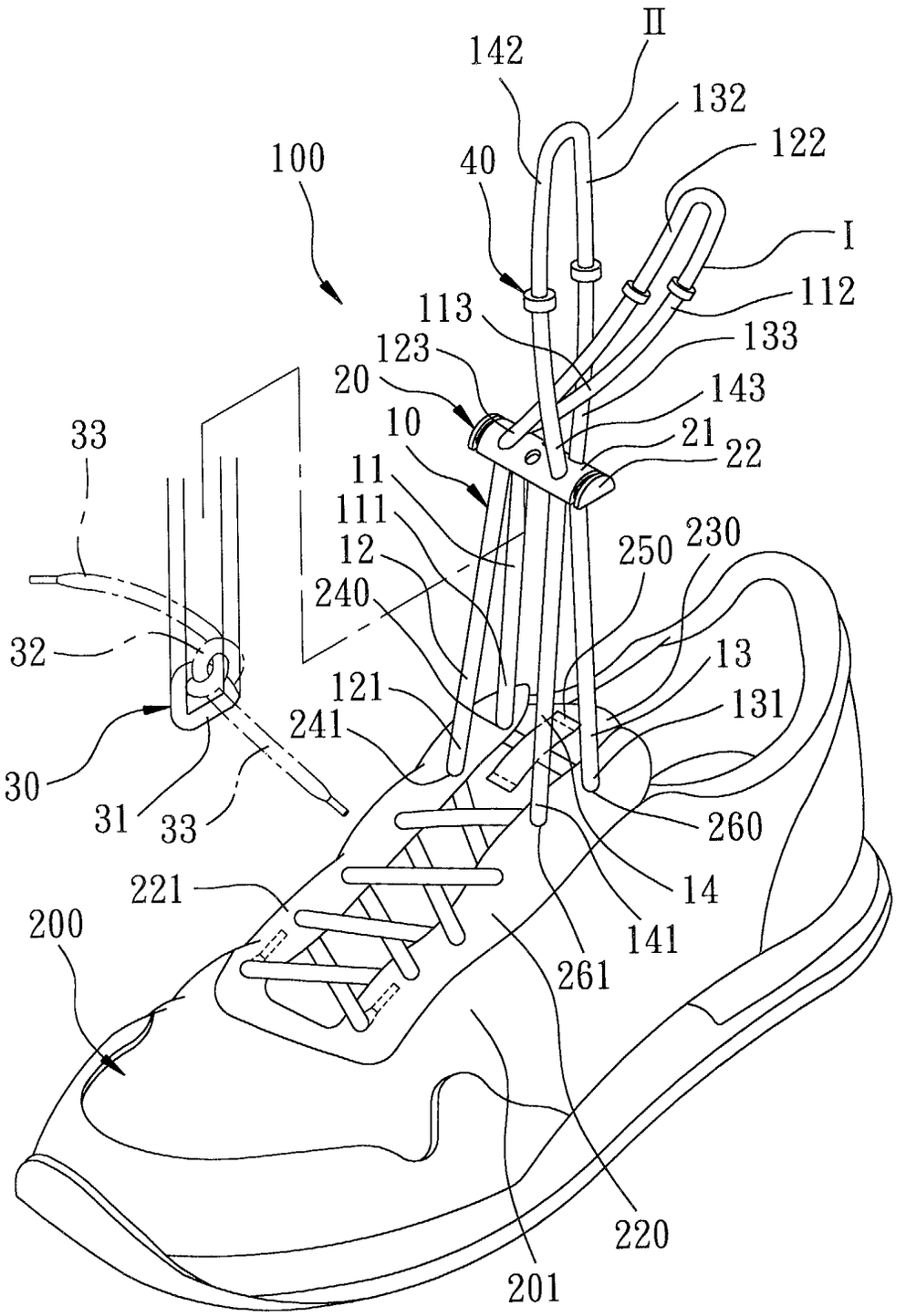
II
142
132
122
100
40
I
112
113
133
123
20
143
10
21
22
33
11
111
12
250
230
240
13
32
121
131
241
30
31
33
260
221
14
200
141
261
220
201

FIG. 3

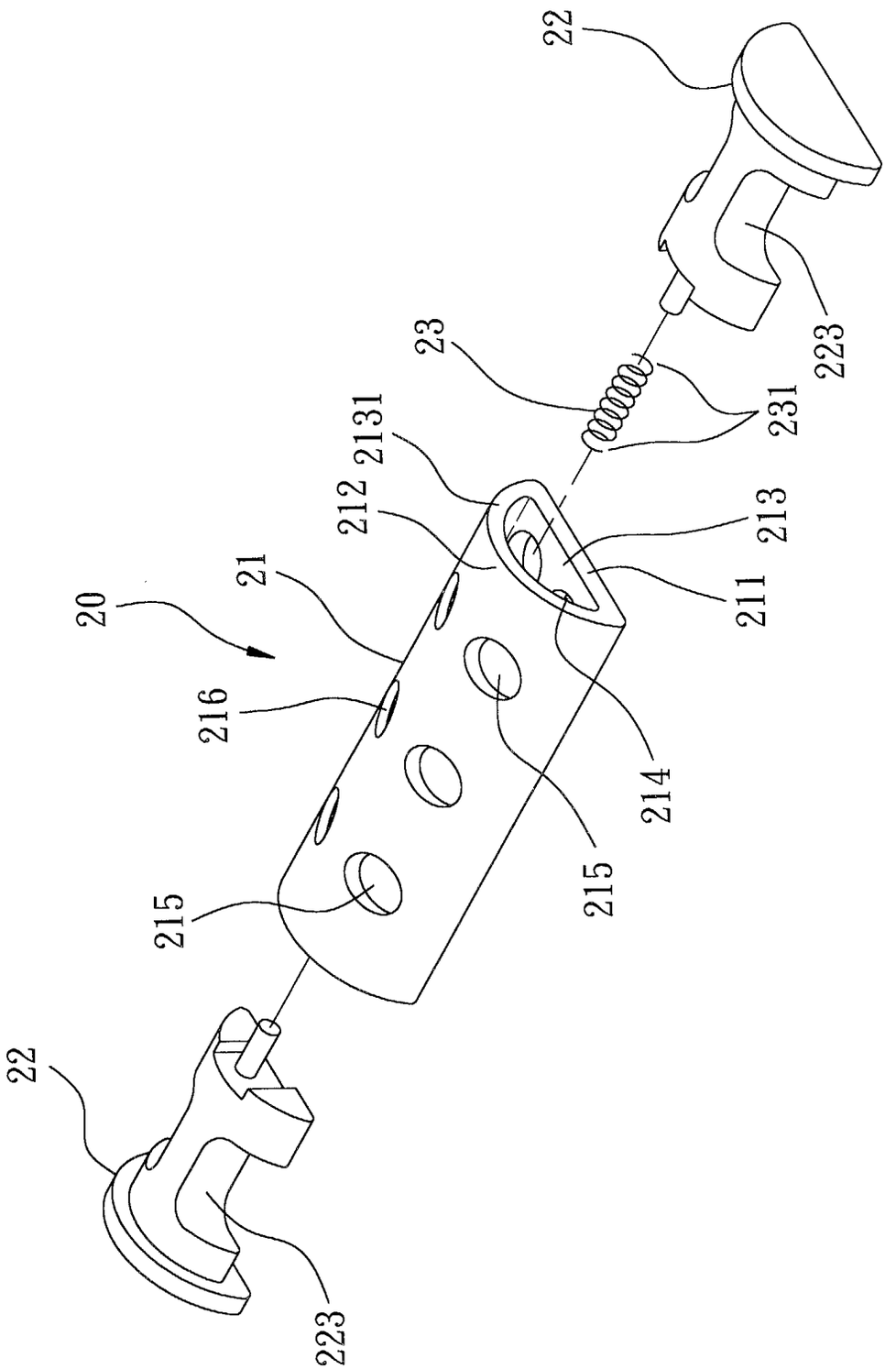

FIG. 4

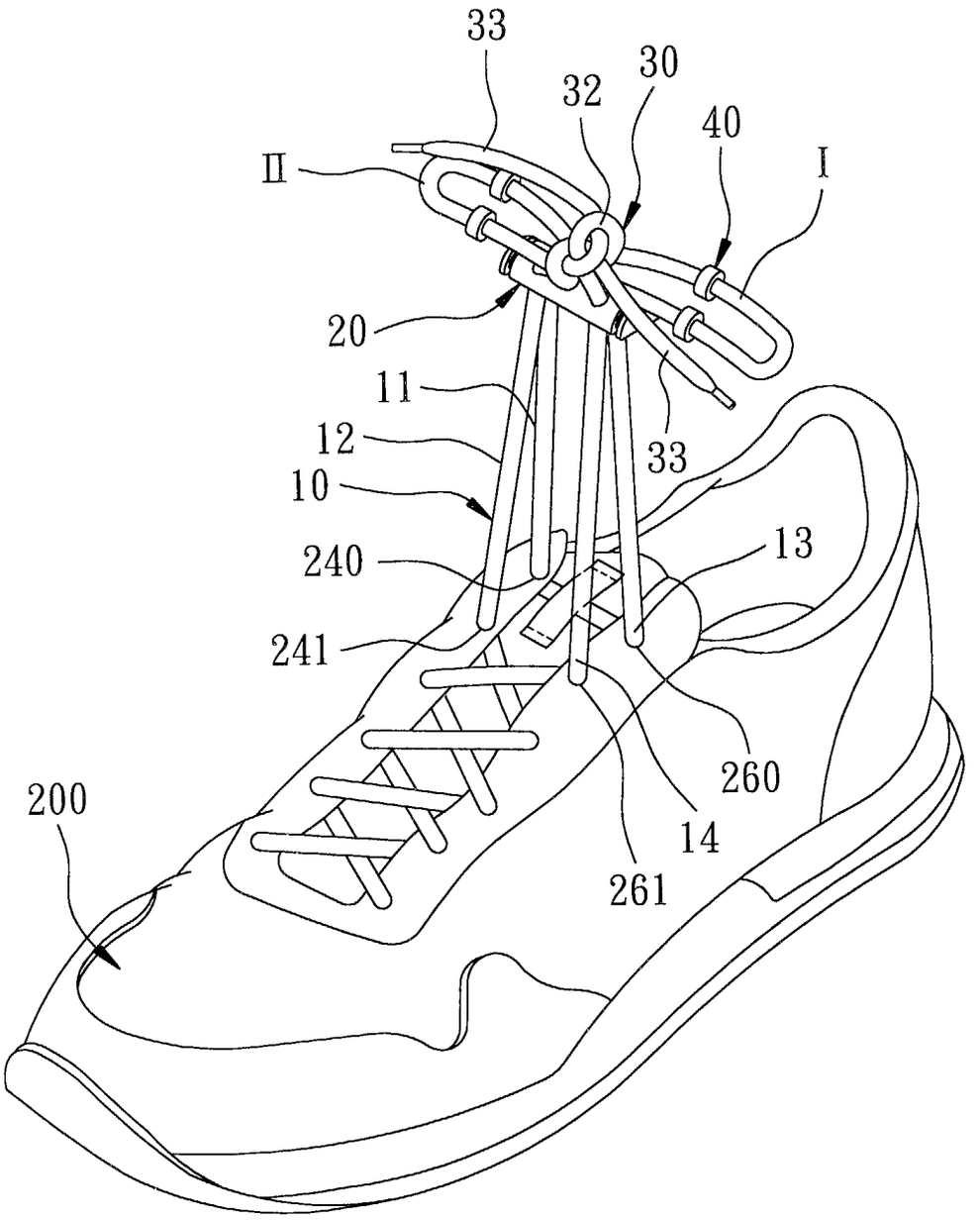

FIG. 5

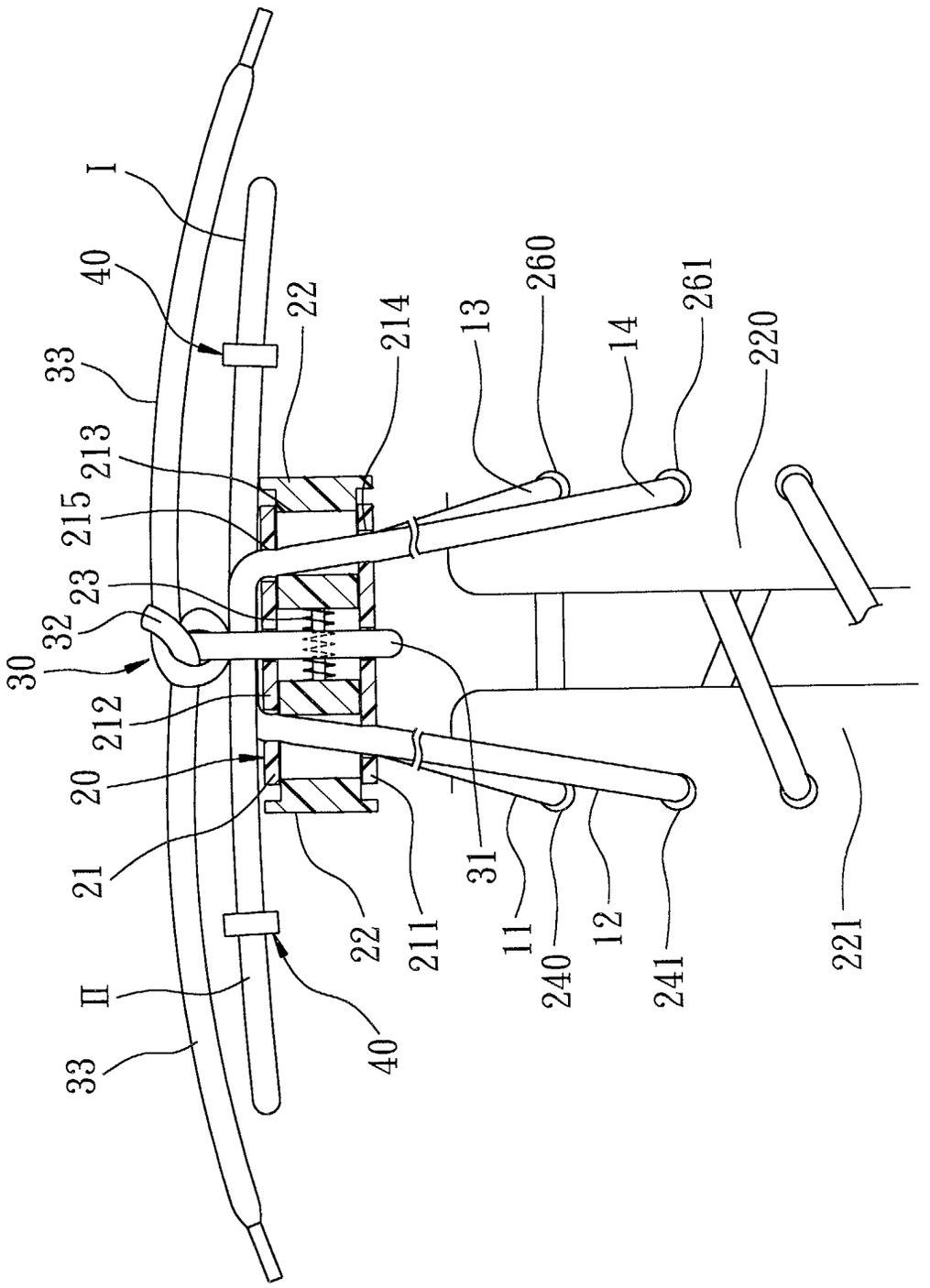
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FIG. 6

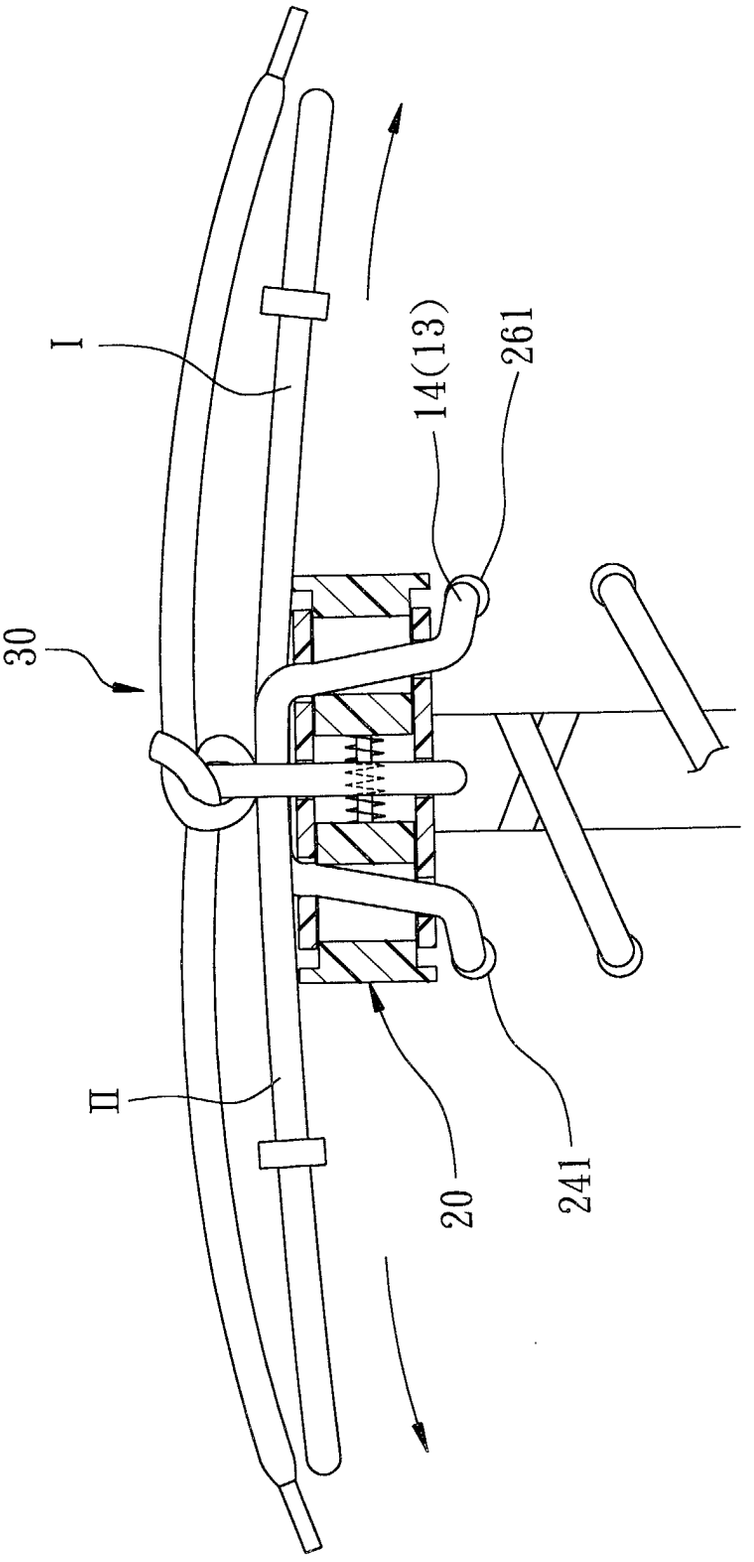

FIG. 7

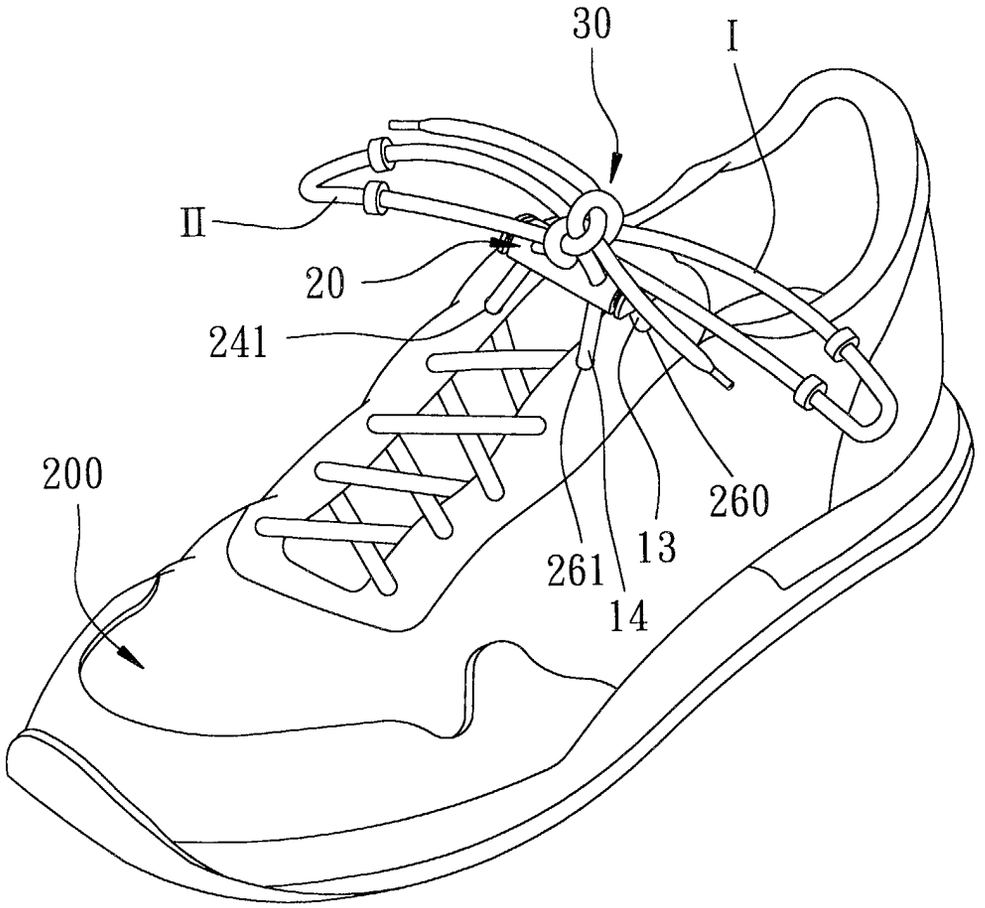

FIG. 8

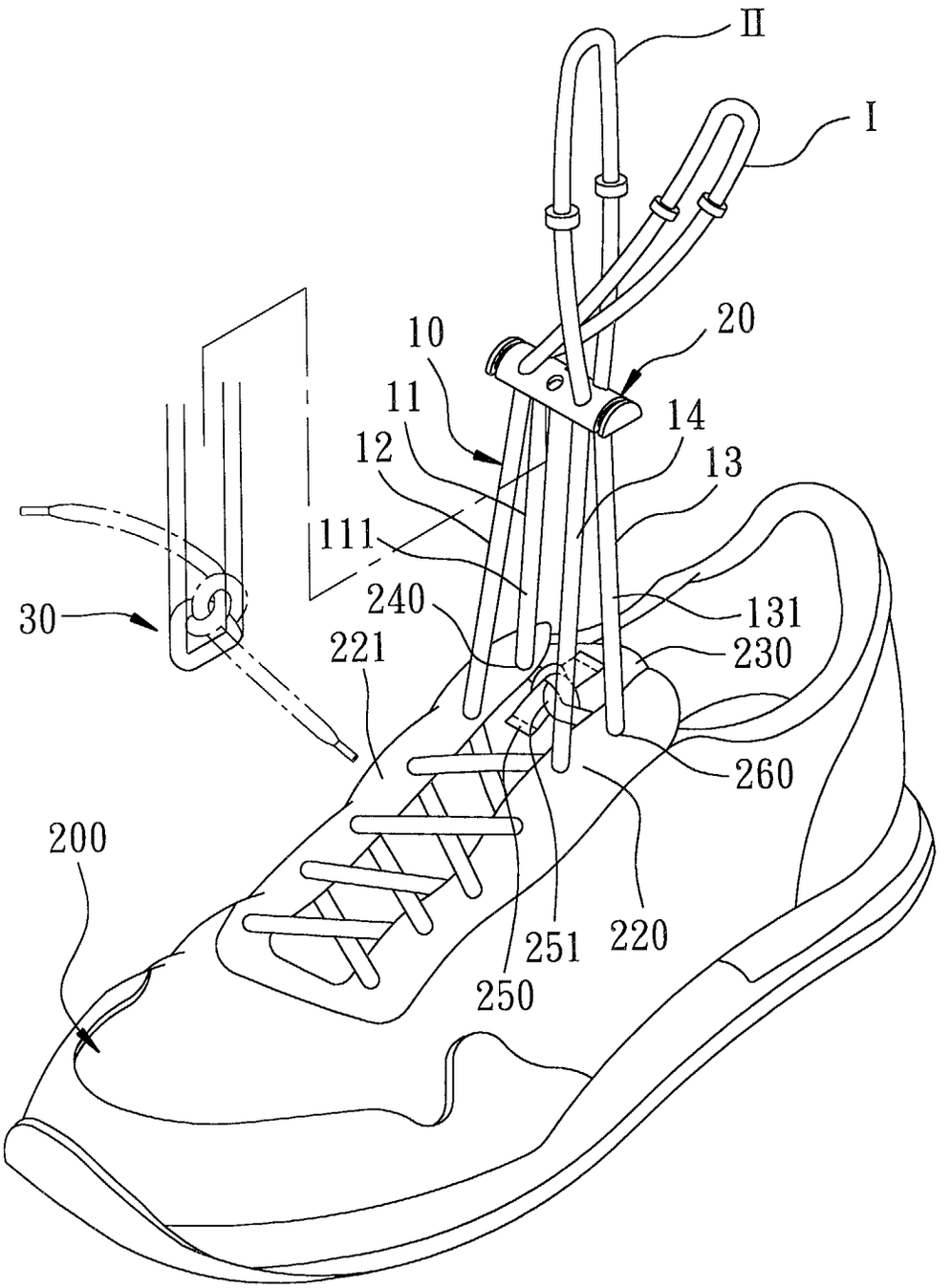

FIG. 9

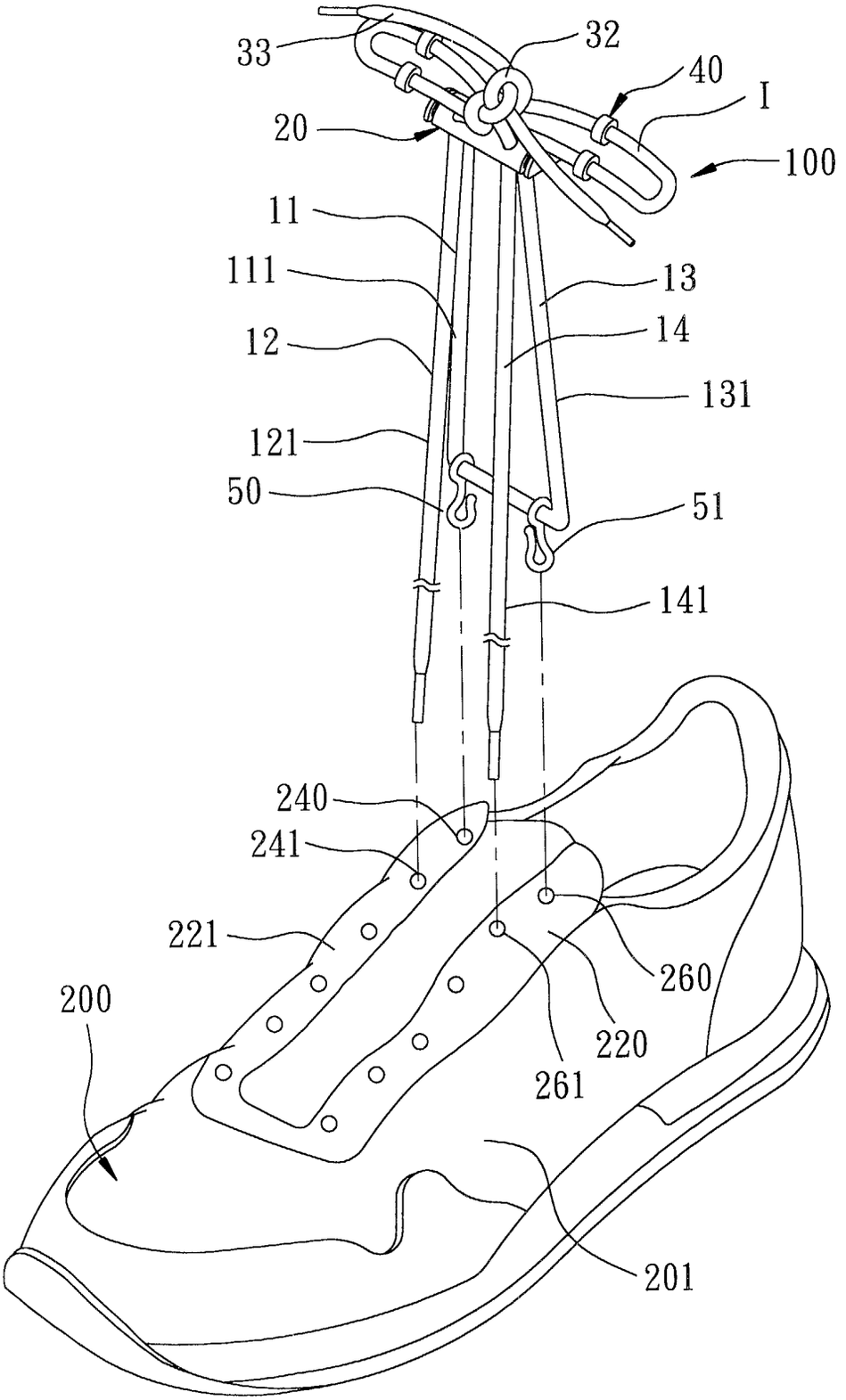
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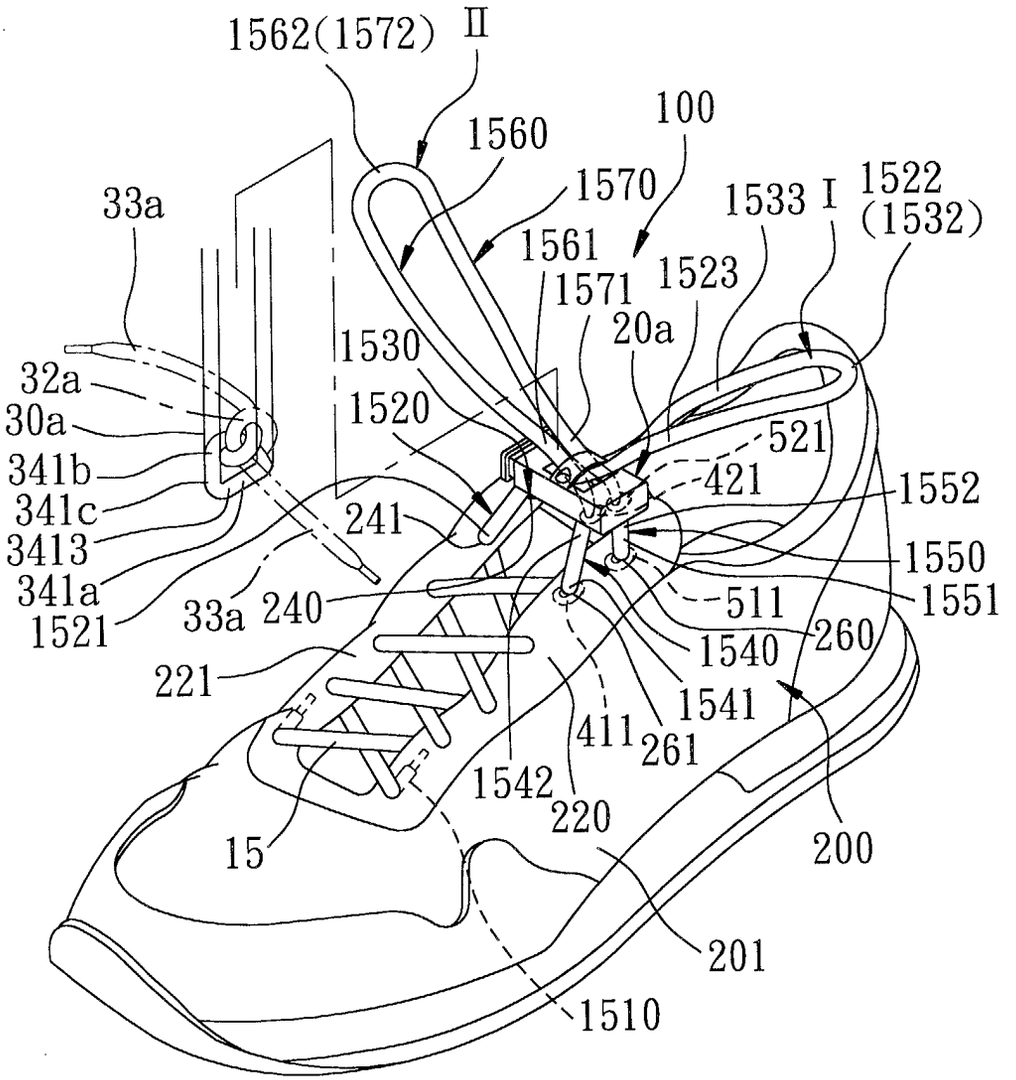
FIG. 10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341a
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FIG. 11

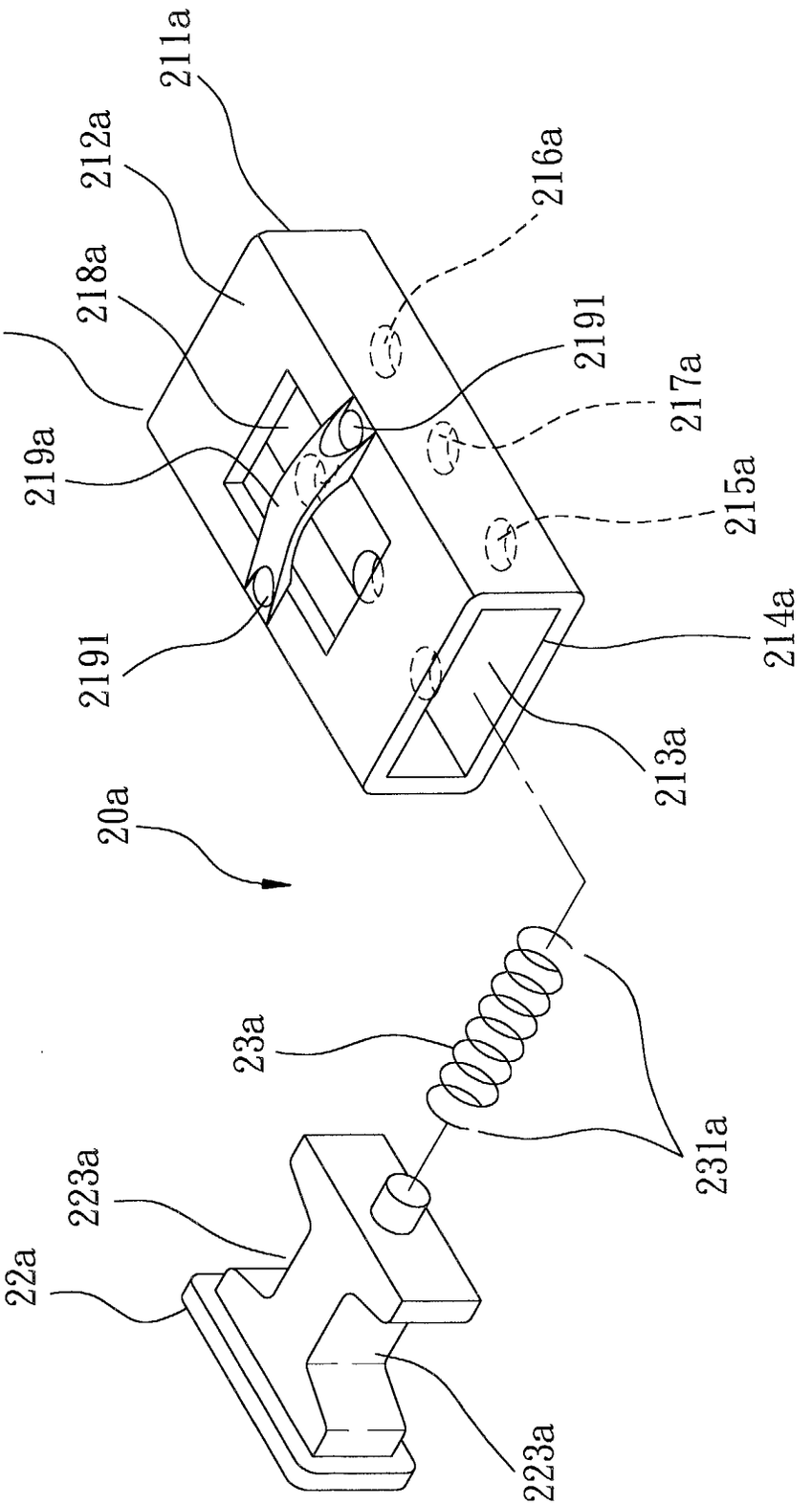
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FIG. 12

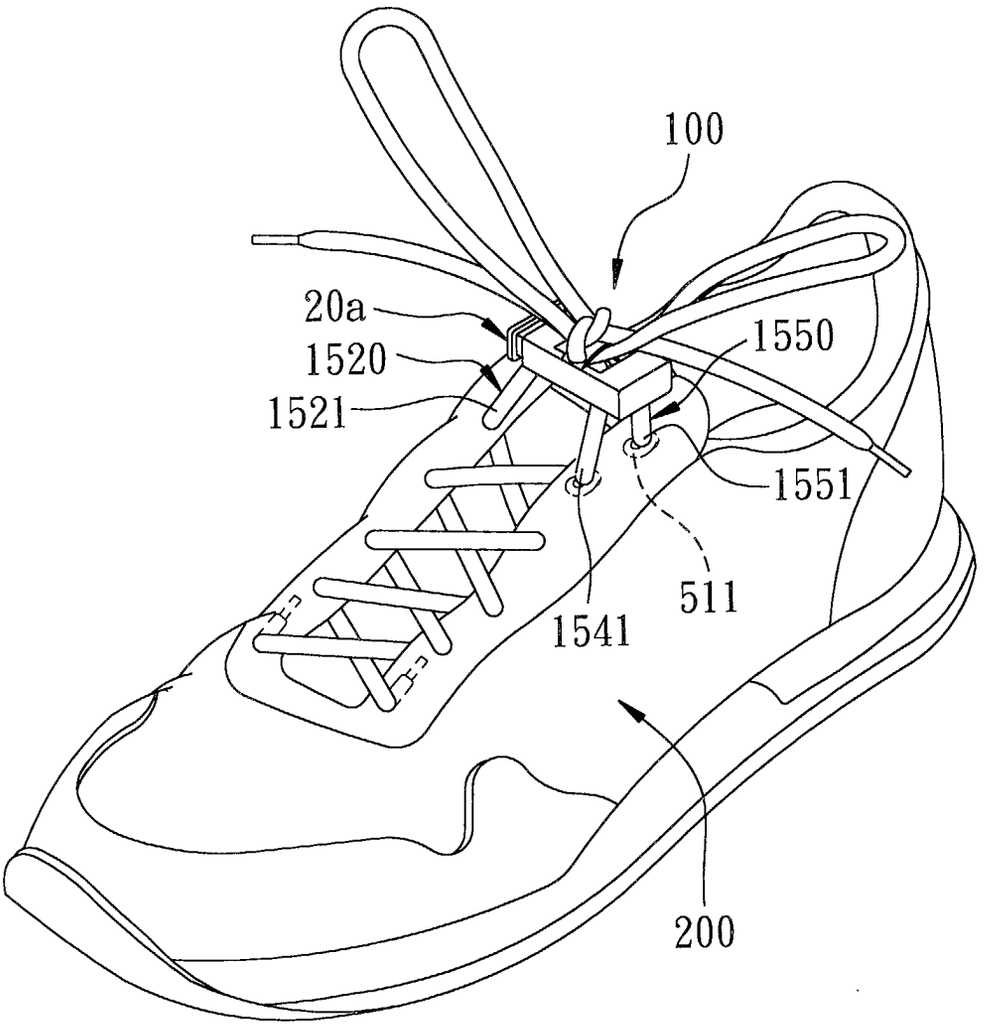

FIG. 13

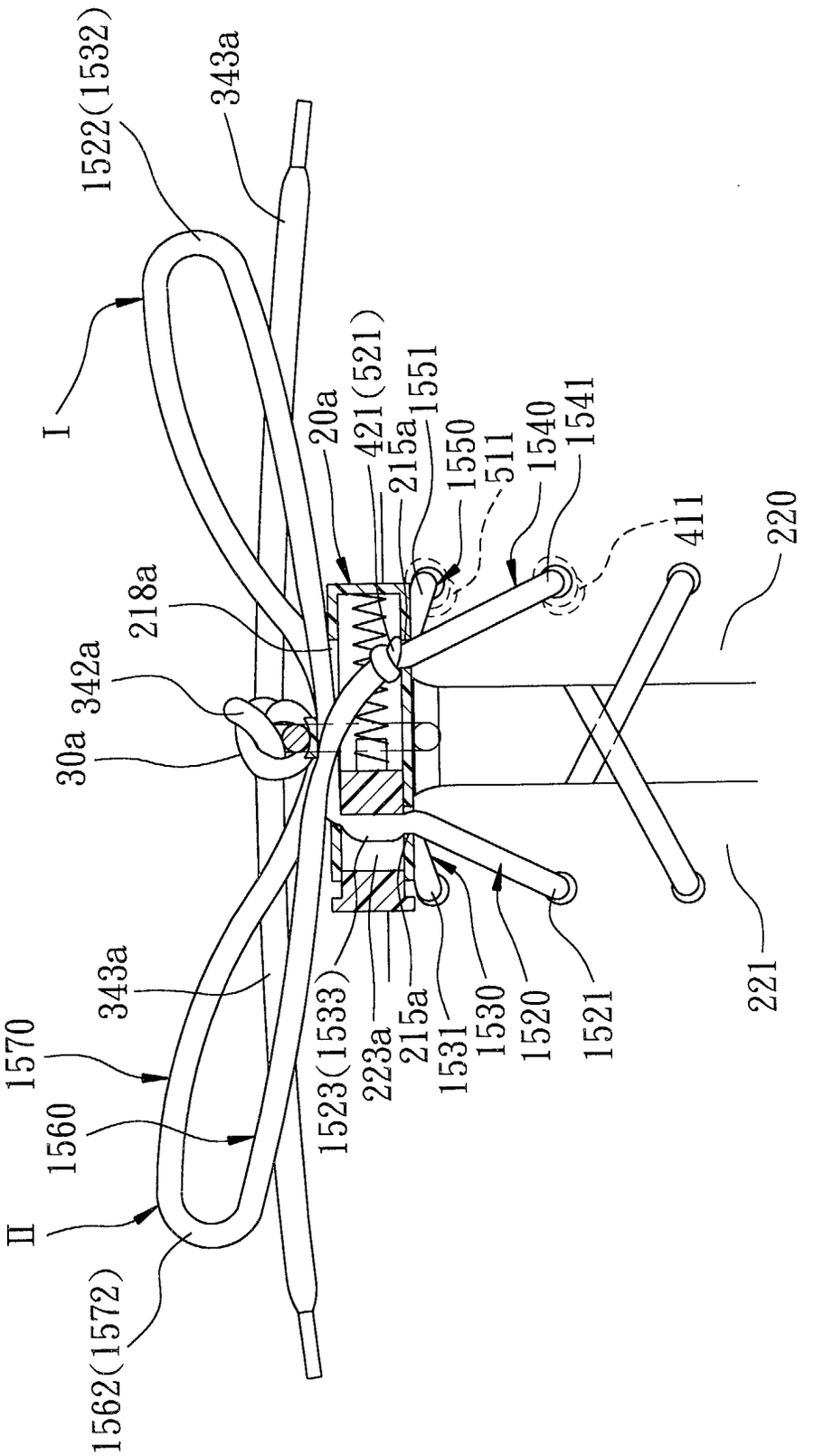
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FIG. 14

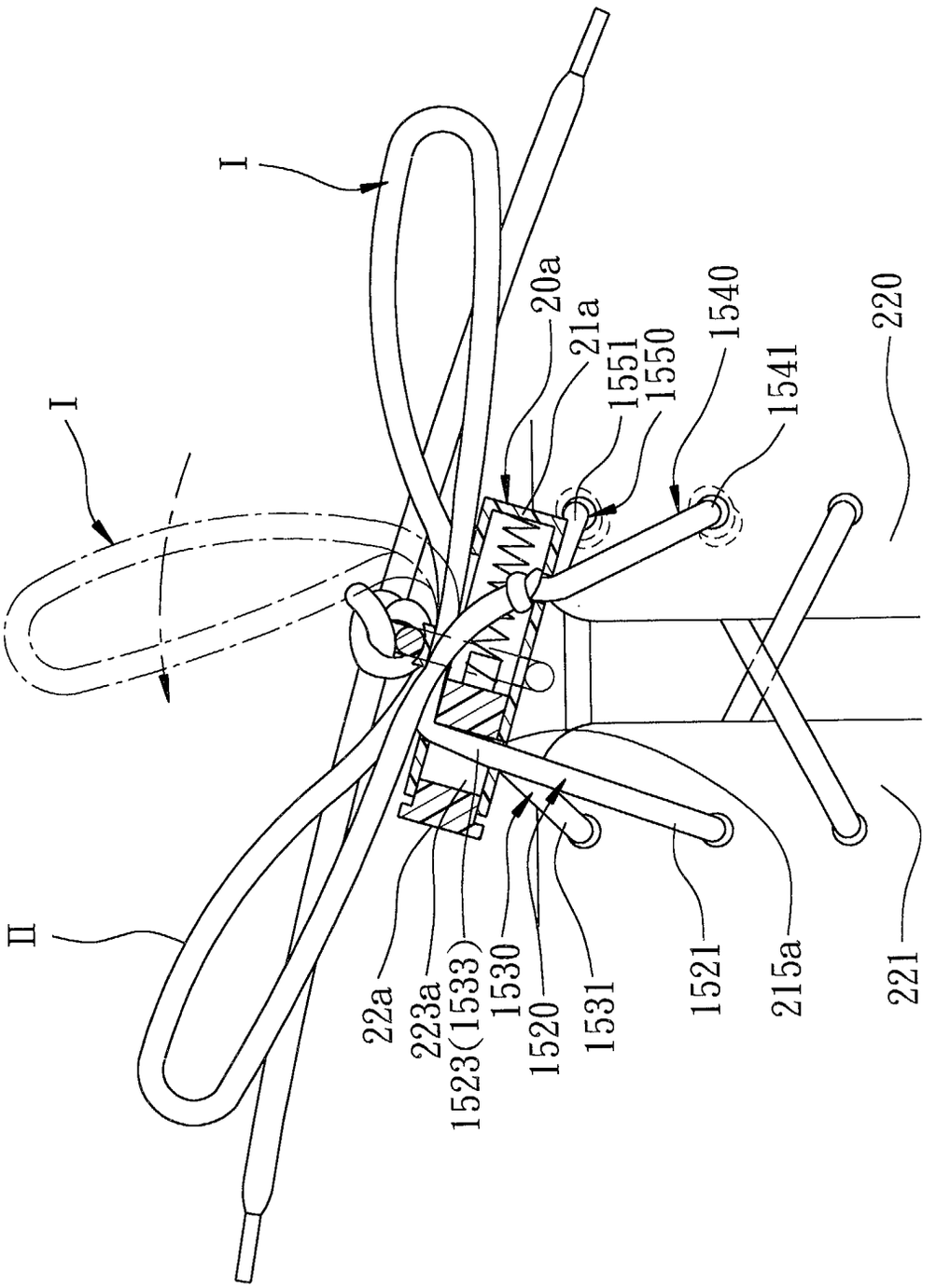
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FIG. 15

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
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A43C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	4 July 2002	Schölvinck, T.S.

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