of the shoulder strap 101B is connected to the thigh strap 102B (described later), and the other end is integrally formed with another back strap (not shown). Note that the other back strap (not shown) is located behind the back strap 103 in FIG. 1A (i.e., the back side of the paper sheet of FIG. 1A). The other back strap (not shown) extends downward from the boundary between the other back strap (not shown) and the shoulder strap 101B and is formed integrally with the connecting strap 104A. Note that the reason for distinguishing the shoulder strap 101B and the connecting strap 104A from each other by having given mutually different reference symbols in the description of the harness type safety belt 100 is because of the convenience of description as described above. The total length of the shoulder strap 101B, the other back strap (not shown), and the connecting strap 104A is set in the same manner as described above.

[0028]

As with the thigh strap 102A, the thigh strap 102B is a band-like strap having a predetermined length, and a part (for example, an end part) of the connecting strap 104B is fixed near the center in the longitudinal direction thereof (the connecting part 123B). Further, as in the case with the thigh strap 102A, the first buckle 124B and the second buckle 125B are respectively provided at both ends of the thigh strap 102B.

[0029]

In addition, the shoulder straps 101A and 101B are connected to each other or coupled together with the upper strap holder 108. Further, the shoulder strap 101A and the

suppressed. As a result, both the improvement of the safety of the harness type safety belt 300 and the reduction of the sense of tightness at the time of wearing the harness, which could not be compatible with each other in the past, can be achieved.

[0078]

In addition, as for the stretchable members 340 provided for the connecting straps 304A and 304B, the static load F (N) required for stretching the length ΔL (mm) within the range of 45 mm to 120 mm satisfies the relationship of the above formula (1). By having the force required to stretch the stretchable member 340 by 45 mm to 120 mm in the range of the above formula (1), the sense of tightness can be reduced even when the harness type safety belt is worn in close contact with the body. This can suppress the situation in which the harness type safety belt is worn loosely. As a result, both the improvement of the safety of the harness type safety belt 300 and the reduction of the sense of tightness at the time of wearing the harness, which could not be compatible with each other in the past, can be achieved.

[0079]

Further, the stretchable members 320A and 320B respectively provided for the thigh straps 302A and 302B are disposed on the buttock side of the user. By providing the stretchable members 320A and 320B on the buttock side of the user, it becomes possible to further reduce the sense of tightness at the time of wearing the harness at places where the stretching of the thigh straps 302A and 302B is necessary. This also contributes to secure the degree of adhesion to the body in regions where stretching is unnecessary, and further

the stretchable member 430. The connecting parts 432 are connected to respective ends of the bello-like part 431 and are connected to the back strap 403.

[0091]

Referring to FIG. 16C, the stretchable members 440A (440B) include the bello-like part 441A (441B) and the connecting parts 442A (442B). The bello-like part 441A (441B) has an kinked(corrugated) structure that stretches in a length direction. The kinked(corrugated) structure is arranged in the middle of the stretchable member 440A (440B). The connecting parts 442A (442B) are connected to the respective ends of the bello-like part 441A (441B) and are connected to the connecting strap 404A (404B). By providing the stretchable members 440A and 440B that are stretchable in the connecting straps 404A and 404B in this manner, it is possible to resolve the phenomenon in which the straps of the harness give a sense of tightness and the phenomenon in which the straps bite into the thighs when the user crouches down.

[0092]

As described above, the configurations and dispositions of the stretchable members 420A, 420B, 430, 440A, and 440B are respectively the same as the configurations and dispositions of the stretchable members 220A, 220B, 130, 340A, and 340B described above. Therefore, concrete description of them will be omitted.

[0093]

When the position of the upper strap holder 408 in the back strap 403 is taken as an upper end and the positions of the connecting parts between the pair of connecting straps

404A and 404B and the pair of thigh straps 402A and 402B are taken as a lower end, the stretchable member 430 of the harness type safety belt 400 is arranged in a region where the ratio of the distance from the lower end with respect to the distance from the lower end to the upper end is equal to or less than 53 %. By providing the stretchable member 430 in this region, the safety of the harness type safety belt 400 can be improved in regions where stretching is unnecessary, and the sense of tightness at the time of wearing the harness can be reduced at places where stretching of the back strap 403 is necessary.

[0094]

In addition, the stretchable member 430 provided for the back strap 403 is configured to be capable of stretching the back strap 403 by 10 % to 18 % in the extending direction of the back strap 403. By having the stretchable member 430 stretching within this range, the safety of the harness type safety belt 400 improves, and the sense of tightness at the time of wearing the harness can be reduced.

[0095]

[Effects]

To describe effects of the present embodiments, description will be made with referring to FIGS. 17A and 17B, and FIGS. 18A to 18C, as a premise, on the tendency of the conventional harness type safety belt. FIGS. 17A and 17B are drawings showing how the back strap and the thigh straps slide upward due to the body movement of the user wearing a conventional harness. FIG. 17A shows a state in which the user O is wearing a conventional

[0114]

In the harness type safety belt 300H according to the present modification example of the H-type, the stretchable members 340AH and 340BH that are stretchable are provided at the respective positions in the back straps from the buttocks to the thighs of the user (at the positions corresponding to the connecting straps in the other examples described above). In addition, in the harness type safety belt 300H, the stretchable members 320AH and 320BH that are stretchable are provided for the respective thigh straps 302AH and 302BH. The configurations, placement positions, etc. of these stretchable members are the same as those of the third embodiment. Therefore, it is possible to apply any of the additional embodiments and any of the modification examples of the third embodiment, to the modification example of the H-type.

[0115]

It is also possible in the Y-type harness to employ a configuration in which a back strap and a shoulder strap are reversed in the anteroposteria direction.

[0116]

[Other modification examples]

FIG. 22 is a rear view showing an outline of a harness according to another modification example. As shown in FIG. 22, the harness type safety belt 300α includes the shoulder straps 301Aα and 301Bα, the thigh straps 302Aα and 302Bα, the back strap 303α, the connecting straps 304Aα and 304Bα, the D-ring 307α, the upper strap holder 308α, and