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3,366,380

WEIGHTED ANKLE BAND

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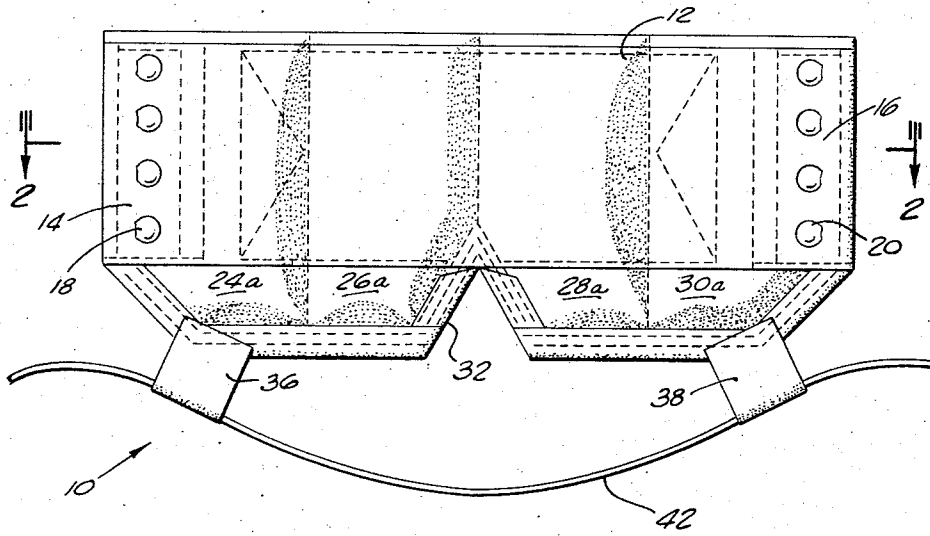


FIG. 1

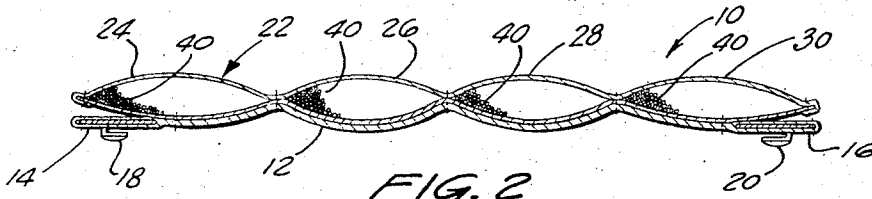


FIG. 2

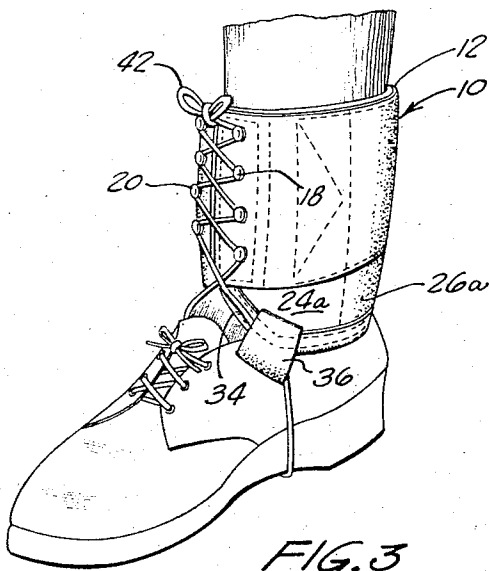


FIG. 3

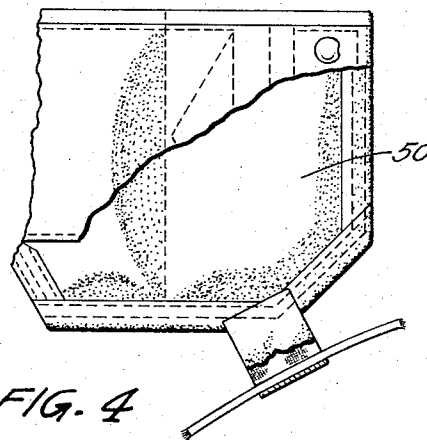


FIG. 4

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3,366,380
WEIGHTED ANKLE BAND
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The present invention relates to devices for physical training purposes and more particularly to a weighted ankle band.

There has been in recent years a substantial increase in the use of training weights, such as wrist, belt and ankle weights, as well as weighted vests, for the purpose of strengthening muscles, improving endurance and coordination, increasing the spring in the legs of athletes, and the like. When using training weights of this character, it is found that some degree of care must be taken, otherwise the training weights may bruise or injure the wearer to the extent that his entire training or conditioning program is set back. This is particularly true when using ankle weights. The latter are most effective when fitted around the ankle of the wearer so as to be as far down on the leg as is possible, and when so used they more closely overlie this joint than is the case with the other training weights which may be fitted to other parts of the body. Also, because of the considerable movement that occurs at the ankle when running or carrying on similar exercises, this joint is more apt to be injured by a training weight that is improperly fitted than is the case with training weights that fit on other parts of the body. Likewise, an improperly fitted training weight will discourage its use because of the discomfort to the wearer.

Accordingly, it is an important object of the present invention to provide an improved ankle weight or band which is constructed and arranged so that it can be used extensively by one who is carrying on a physical training program and which will not injure or cause discomfort to the wearer.

It is another object of the present invention to provide an improved ankle weight of the foregoing character which is constructed and arranged so that local or concentrated pressure points on parts of the foot will be avoided during the carrying on of extensive or prolonged exercises by the wearer, thus assuring that there will be freedom from pain or injury to the wearer from such causes.

It is still another object of the present invention to provide an improved ankle weight of the foregoing character which includes means for fastening the ankle weight to the foot of the wearer, such fastening means functioning to keep the ankle weight in the proper location on the foot and being constructed and arranged so that it will avoid exerting harmful pressures on the foot of the wearer.

It is still another object of the present invention to provide an improved ankle weight of the foregoing character wherein such fastening means will enable the ankle weight to be worn at different times by any one of a group of athletes, and such fastening means will be effective to fit the ankle weight properly to the foot of each such wearer, thereby permitting general usage among a number of students in school training programs and the like.

Other objects of this invention will appear in the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

In the drawings:

FIGURE 1 is an extended elevational view of a weighted ankle band embodying the present invention;

FIGURE 2 is a sectional view taken on the line 2-2 of FIGURE 1;

FIGURE 3 is a perspective view showing the weighted

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ankle band of FIGURE 1 fastened to the foot of a wearer; and

FIGURE 4 is a fragmentary extended elevational view of a modified form of the invention.

Before explaining the present invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also, it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

Referring now to the drawing, the invention will be described in greater detail. The weighted ankle band 10 comprises a flexible outer band 12 which may be formed from a suitable material, such as leather, which is flexible but has self-sustaining physical properties so that it will aid in sustaining the weighted ankle band 10 in proper position on the foot of the wearer. Extending transversely across and attached to the opposite end portions 14 and 16 are pluralities of lace hooks 18 and 20.

A flexible inner band 22 is attached to the outer band 12 and has formed therein a plurality of pockets 24, 26, 28 and 30 which are disposed transversely of the length of inner band 22, and have depending portions 24a, 26a, 28a and 30a which extend outside or below the confines of the outer band 12. The pockets 26 and 28 are constructed and arranged so that their depending portions 26a and 28a define at the mid-portion of the length of the ankle band 10 an inverted V-shaped notch 32, and similarly, the pockets 24 and 30 are constructed and arranged so that depending portions 24a and 30a have angular disposed corners at their remote ends so that when the ankle band 10 is closed, as shown, for example, in FIGURE 3, a generally inverted V-shaped notch 34 is defined thereby. The V-shaped notches 32 and 34 serve to enable the depending portions 24a, 26a and 28a, 30a to overlie and extend downwardly on opposite sides of the foot of the wearer to the maximum extent that is practical.

The pockets 24, 26, 28 and 30 are filled with weights 40, and preferably such weights are granular lead or similar heavy material. It is preferred that granular material be employed, instead of solid blocks of metal, as has sometimes been used in the art, because granular material will more easily conform to the shape of the foot when the ankle band is properly attached to the foot, and the granular material when properly supported on the foot will not create concentrated or local pressure points on the foot of the wearer when the ankle band is in use.

The depending portions 24a and 30a have attached thereto loops 36 and 38 through which a lace 42 is adapted to be passed. When so assembled, the weighted ankle band 10 can be secured to the ankle of a wearer, in the position shown in FIGURE 3. As shown, the lace 42 extends under the arch of the wearer so that the depending portions 24a, 26a, and 28a, 30a will be held in position along opposite sides of the foot of the wearer. Also, the lace 42 is passed through the hooks 18, 20 so that the outer band 12 can be fitted snugly around the foot immediately above the ankle of the wearer. In this arrangement of fastening the ankle band 10 to the foot, the lace 42 remains on the outside of the shoe or ankle band so as not to press directly on any local part of the foot so as to create discomfort or a sore spot for the wearer when the ankle band is used.

From the foregoing description, it can be understood that the described embodiment can be fitted easily and quickly to the foot of a wearer, and neither the fastening means nor the weights will create local or concentrated pressure points on the foot of the wearer, when the ankle band 10 is used. Also, the outer band 12 provides a

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rigidifying support for the portion of inner band 22 which is within the confines of outer band 12 so that a firm support is provided for the ankle band 19 above the ankle of the wearer, and the outer band 12 normally will not fold or crease in use from effects of the weights 40 or from other causes when the wearer is running or similarly participating in exercises. It is also to be observed that the depending portions 24a, 26a and 28a, 30a are relatively more flexible than the portions thereabove, because such depending portions are not within the confines of the outer band 12. Thus, the depending portions provide weight concentration at a low point on the foot, but because of the relatively flexible character of these depending portions and the granular weight therein, there will be no irritation or annoyance caused thereby to the wearer.

The present invention is not restricted to any specific material. Thus, the inner band 50, FIGURE 4, may be made from an elastic material which will be even more form fitting than a non-elastic material such as is used in making the band 22 of the embodiment of FIGURE 1.

Having thus described my invention, I claim:

1. A weighted ankle band for physical training purposes comprising a flexible outer band with a plurality of lace hooks positioned transversely across opposite end portions thereof, a flexible inner band secured to said outer band and having a plurality of pockets disposed transversely throughout the length thereof, said inner band having a depending portion between each of its ends and its midportion, which depending portions are outside the confines of said outer band, said depending portions being shaped to provide generally inverted V-

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shaped notches at said midportion and at said ends when such ends are in abutting relationship, loop means secured to each of said depending portions adjacent to the ends of said inner band, a lace fitting through said loop means and adapted to fit under the arch of the wearer of the ankle band and to be fitted through said hooks, and weights carried in said pockets.

2. A weighted ankle band as is claimed in claim 1 wherein said inner band comprises an elastic material.

3. A weighted ankle band as is claimed in claim 1 wherein said weights comprise granular material.

References Cited

UNITED STATES PATENTS

15	1,351,248	8/1920	Hill	128—166
	1,572,313	2/1926	Sarar	36—1.5
	1,729,209	9/1929	Curtice	272—57
	2,241,833	5/1941	Waller	272—57
20	3,278,184	10/1966	Rosenbaum	272—57
	3,306,610	2/1967	Biggs et al.	272—57

FOREIGN PATENTS

	572	1890	Great Britain.
	119,798	10/1918	Great Britain.
25	259,420	10/1926	Great Britain.
	509,276	7/1939	Great Britain.

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