ELASTIC PULL TYPE EXERCISING DEVICE

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ABSTRACT

In a chest pull type exerciser the tension cords or bands are individually removably connected to their opposite handles by generally U-shaped spring clips which have an integral closed ring or loop at their bite portions to retain the clips to loop on the cable ends after the clips are disconnected from the handles.

1 Claim, 3 Drawing Figures
ELASTIC PULL TYPE EXERCISING DEVICE

This invention relates to exercising apparatus, and more particularly, to improvements in chest pull type exercisers.

It is an object of this invention to provide a low cost adjustable chest pull type exerciser which can be quickly and conveniently adjusted without tools or loose falling parts.

Briefly, in the invention the tension cable or bands are individually connected to their opposite handles by removable clips which are self-retaining on the cable ends.

The features of the invention which are believed to be novel are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and operation, together with further objects and advantages thereof, may best be understood by reference to the following description taken in connection with the accompanying drawing in which:

FIG. 1 is an elevation view of one form of the invention;
FIG. 2 is an elevation view of another form of the invention; and
FIG. 3 is a sectional view taken along the line 3—3 of FIG. 2.

Referring now particularly to the patent drawing, FIGS. 1 and 2 each show one end of an exerciser unit of the chest pull type. The not shown opposite end of the units will be the same as shown in these two FIGS. In FIG. 1 the invention is shown in connection with continuous coil type tension springs 10 whereas in FIG. 2 the tension members are rubber cords 11 which are fitted at their ends with short coil springs 10' which are similar in construction to the outer ends of the continuous coil type tension springs 10. That is to say, the outer extremities of the springs 10 and fittings 10' are provided with an integral closed turn, ring, or loop 10''.

These loops 10'' are aligned with the lengthwise axis of the springs 10 or bands 11.

The handles 12 are open and preferably constructed from molded plastic material. They are generally trapezoidal in shape and their outer sides comprise hand grips 13 whereas their inner sides 14 have the opposite ends of the several tension members 10 or 11 individually removable connected thereto. In other words, in the invention any one or more of the tension members 10 or 11 can be removed or added without disturbing the others; and also, this can be done in a quick manner merely with the bare fingers. Also, no tools are required, and in addition, there are no loose falling parts.

This is accomplished by special generally U-shaped spring clips 15, see also FIG. 3, and a plurality of spaced apertures 18 formed in the handle side 14. The bite portions of the spring clips 15 have closed rings or loops 16 integrally formed thereon. Either one of the legs 17 of spring clip 15 can be passed through the ring 10'' and then the legs 17 spread apart slightly to position the ring 10'' inside the ring 16. This locks the spring clips 15 on the ends of the members 10 or 11 so that when they are removed from the handles there are no loose falling parts.

The spaced apertures 18 in the handle are flat through grooves which are specially shaped and dimensioned to closely receive the specially shaped clips 15.

In other words, the clips 15 are snug or nearly snug in the grooves 18 so that there isn’t excessive looseness or rattling between the handles and tension members.

At their outer ends the spring clip legs 17 are turned outwardly and then toward each other into integral loops 19. At their inner ends the legs 17 are inwardly formed to provide integral shoulders 20. The inner ends of grooves 18 are formed with matching shoulders 21. Thus, the shoulders 20 engage the shoulders 21 and the loops 19 engage the outer edges of the grooves 18 when the spring clips are in position in their handle apertures. In other words, shoulders 20 and loops 19 serve as stops for removably locking the clips 15 in the grooves 18.

The curved portions or loops 19 also make it easy to remove the clips 15. Opposite loops 19 can be gripped between the thumb and fingers of the hand to squeeze the clips to withdraw them. To insert them the flat parts of the legs 17 are squeezed to position the loops 19 in the grooves. When they are pushed through the clips snap spring lock in position with the shoulders 21 engaging shoulders 21 and loops 19 engaging the outer edges of the grooves.

While there has been shown and described a particular embodiment of the invention, it will be obvious to those skilled in the art that changes and modifications may be made without departing from the invention, and therefore, it is intended by the appended claims to cover all such changes and modifications as fall within the true spirit and scope of the invention.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. In a pull type exerciser unit comprising a handle with a plurality of spaced apertures formed therein, a plurality of generally parallel spaced elongated members connected at their ends to said handle, individual removable connections for said ends to said handle, said individual removable connections comprising substantially closed loops on said ends, generally U-shaped spring clips for attachment to said loops, said clips having closed rings integrally formed in the bite portion thereof each of said bite portions extending outwardly in one uninterrupted continuous member forming one of said rings, each of said U-shaped clips and rings being formed of one continuous member, each of said rings releasably engaging the loop on the end of each elongated member, and integral stops formed on the opposite ends of the free ends of each of said clips, said stops being adapted to removably lock said clips in their respective handle apertures, and

wherein said unit further comprises said handle and another handle identical to said handle spanned by said plurality of parallel spaced elongated members, said elongated members comprising tension members, said handles comprising open plastic material members and said spaced apertures comprising flat through grooves formed in one side of each of said handle, said stops further comprising integral loops formed on the outer ends of said clip legs and integral shoulders positioned on the legs of said clip and spaced from the free ends thereof, and

wherein said spring clips are removably insertable within said grooves, said integral stop loops being engaged with the outer end edges of said grooves,
and shoulders formed at the inner ends of said grooves being engaged by said spring clip shoulders.

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