July 21, 1931. R. H. NOE 1,815,863

EXERCISER

Filed Jan. 9, 1929

Fig. 1.

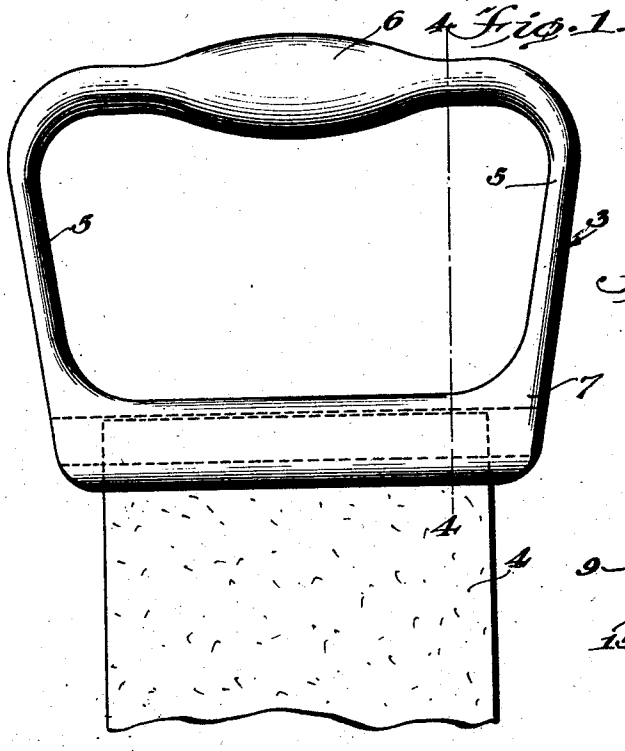


Fig. 4.

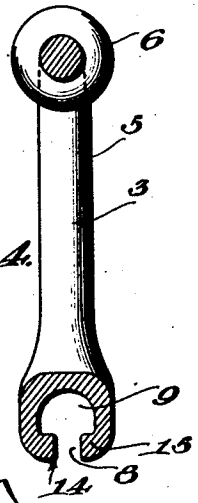


Fig. 5.

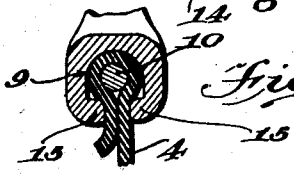


Fig. 6.



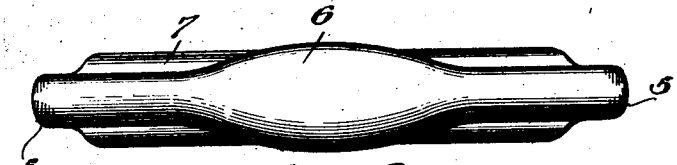


Fig. 2.

Fig. 7.



Fig. 3.

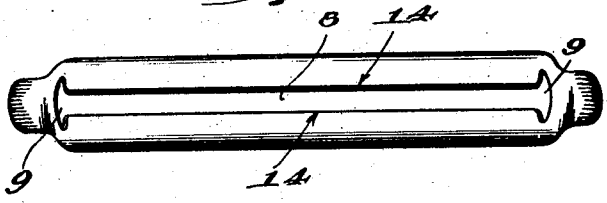
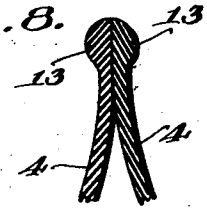


Fig. 8.



WITNESSES

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Patented July 21, 1931

1,815,863

UNITED STATES PATENT OFFICE

ROY H. NOE, OF MEMPHIS, TENNESSEE

EXERCISER

Application filed January 9, 1929. Serial No. 331,295.

This invention relates to improvements in exercisers, the present construction being herein identified as of the slotted handle type.

An object of the invention is to improve the means in a certain type of exerciser, by which the ends of an elastic element (usually a large rubber band in the type in mind) may be instantly and unrestrictedly connected or disconnected, but held with absolute firmness when connected so that there will be no likelihood whatever of the band coming loose to the possible injury of the exerciser.

Another object of the invention is to provide an exerciser handle which is slotted in such a way as to receive the beaded or otherwise enlarged end of an elastic element, the principle being to merely slide the beaded end in or out as it may be desired to make a connection or disconnection.

Other objects and advantages will appear in the following specification, reference being had to the accompanying drawings, in which

Figure 1 is a fragmentary elevation of the type of exerciser herein contemplated, only one of the improved handles being shown,

Figure 2 is a view of the handle illustrating the appearance of one edge,

Figure 3 is a similar view illustrating the opposite and slotted edge,

Figure 4 is a cross section taken on the line 4—4 of Figure 1,

Figure 5 is a detail sectional view illustrating one mode of forming an enlargement on the rubber band,

Figures 6 and 7 are modifications in which the bead is formed integrally with the rubber band,

Figure 8 is a modification illustrating the arrangement in the case of a plurality of bands.

This invention is an improvement on the United States Patent No. 1,633,124 for exercising apparatus, granted to Roy H. Noe on June 21, 1927. That patent is concerned with the clamping in position of one or more elastic elements, the clamping being done at each of a pair of hand grip members, which, together with said elements comprise the exercising apparatus.

In the patent use is made of a clamping member in the form of a plate or strip of metal which is held down against the elastic elements and upon a hand grip member by wing nuts and bolts. The effectiveness of the clamping arrangement has not come to question, but the present problem is to facilitate the attachment and detachment of the elastic elements so that a change from one size of rubber band to another can be made instantly without having to undo any wing nuts or suffering the possible loss of the parts.

Mention has been made of large rubber bands. These are the elastic elements. By preference they are broad, flat rubber bands, although it would be possible to make them in other shapes without detracting from the merits of the invention in the slightest, nor demanding any material modification of the present handle.

The latter, which is also identified as the hand grip member, is denoted 3. In practice a complete exerciser will comprise a pair of the hand grip members, and one or more rubber bands 4. The use of one band is primarily contemplated, although the slotted handle is adaptable to a plurality of bands when made as presently indicated.

Side bars 5 connect a handle or gripping bar 6 and a head 7 so that the two are in substantial parallelism, although this does not appear essential. The head is heavy enough in formation to permit the making of a substantial, longitudinal opening along one edge. This opening comprises a slot 8 and a communicating channel 9. The two extend from end to end of the head 7, being open at places adjoining the side bars 5 so that one end of the band 4 can be slipped in edgewise from either side.

It is necessary to construct the end of the band 4 in such a manner that it will not pull out of the hand grip member while the exerciser is in use. Any one of several modes can be adopted, but the principle in each instance would be to provide the end of the band with a bead or enlargement. This

would occupy the channel 9, while the adjoining part of the band would extend out of the slot 8.

In Figure 5 the end of the band 4 is simply curled over a wood or metal spindle 10. This composes an enlargement or bead to occupy the channel 9. In Figure 6 the bead 11 is made perfectly round excepting where it connects with the band 4. In Figure 7 the bead 12 is cross sectionally formed in agreement with the cross sectional shape of the channel 9. The use of either bead would be optional, the idea of the showing being to illustrate an integral formation of the bead with the band.

It is conceivable that the bead could be made perhaps easier and more cheaply by simply folding over an end of the rubber band 4 and stitching the rubber down, or perhaps cementing it down. It is deemed needless to describe all of the ways of making the bead, it being regarded as sufficient to give these examples and to conclude the requirement by stating that the rubber band needs some kind of an enlargement to prevent it from slipping out of the slot 8.

Figure 8 illustrates how a plurality of bands 4 may be connected with the hand grip member. Here each band has a half enlargement 13. These, when laid together as shown, will compose an entire bead substantially of the shape and size of the beads 11 or 12 in Figures 6 and 7. Ordinarily plural bands might not be desirably used. The exerciser can be equipped with a number of bands 4 of different thicknesses. The simplicity of the mode of attachment afforded by the improved hand grip member makes it easy to substitute a band of one size for another, so that the provision of a plural band arrangement as in Figure 8 might be suspended for the other simpler arrangements.

The use of the exerciser is readily understood. One of the hand grip members 3 is affixed to each end of the rubber band 4. The connection is made by slipping the bead 11 (for example) into the channel 9. Any one or all of the commonly known exercises can then be performed.

In conclusion it is important to observe in Fig. 4 that the various corners or edges denoted 14 are carefully rounded. This is particularly important along the edges of the shoulders or flanges 15 formed by the slot 8 and channel 9. It is at these points that wear on the rubber would occur in the use of the exerciser, but by carefully smoothing and rounding the edges the rubber will simply stretch over and will not be ruined by abrasion.

While the construction and arrangement of the improved exerciser is that of a generally preferred form, obviously modifications and changes may be made without departing from the spirit of the invention or the scope of the claims.

I claim:—

1. An exerciser comprising a hand grip member having a head with a slot and a chamber defining shoulders, and an elastic element having an enlargement to occupy the chamber and rest upon the shoulders when inserted in a seating position.

2. An exerciser comprising a rigid hand grip member having a head with a slot extending from one end to the other thereof, an elastic element, and means around which a plain end of the element is applied to form an enlargement for insertion into the slot from one end.

3. An exerciser comprising a hand grip member having an integral head with a slot open at one end and a chamber defining shoulders, and an elastic element having an integral enlargement slipped into the chamber through said open end to rest upon the shoulders.

Signed at Memphis, in the county of Shelby and State of Tennessee, this 7th day of January, A. D. 1929.

ROY H. NOE.