United States Patent

McKinney

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[54] WRIST EXERCISER

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[52] U.S. Cl. 272/67, 272/DIG. 3

[51] Int. Cl. A63b 21/22

[58] Field of Search 272/67, 68, 79, 84, 81

[56] References Cited

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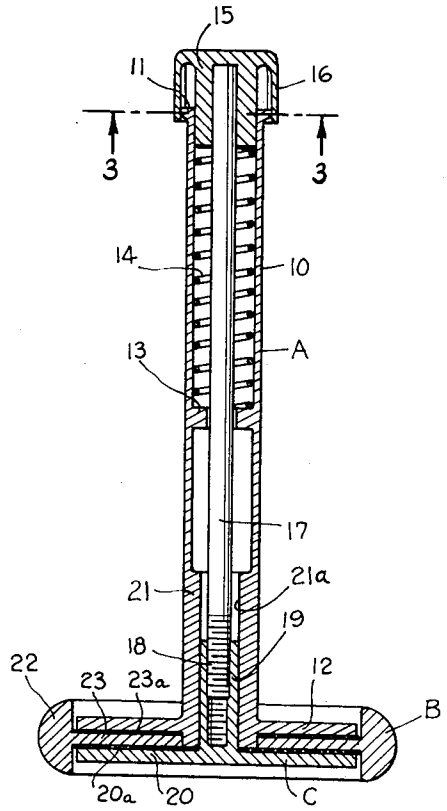
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[57] ABSTRACT

An exercising device for the hands, wrist and forearms including an elongated bar having an enlarged flange integral with one end thereof. An enlarged rotatable member is carried at right angles to the bar in frictional contact with the flange. A friction producing member is carried between the flange and the rotatable member resisting forces exerted by the hands tending to turn the bar with respect to the rotatable member. An adjustable spring is provided for varying the frictional contact between the flange and the rotatable member.

3 Claims, 3 Drawing Figures



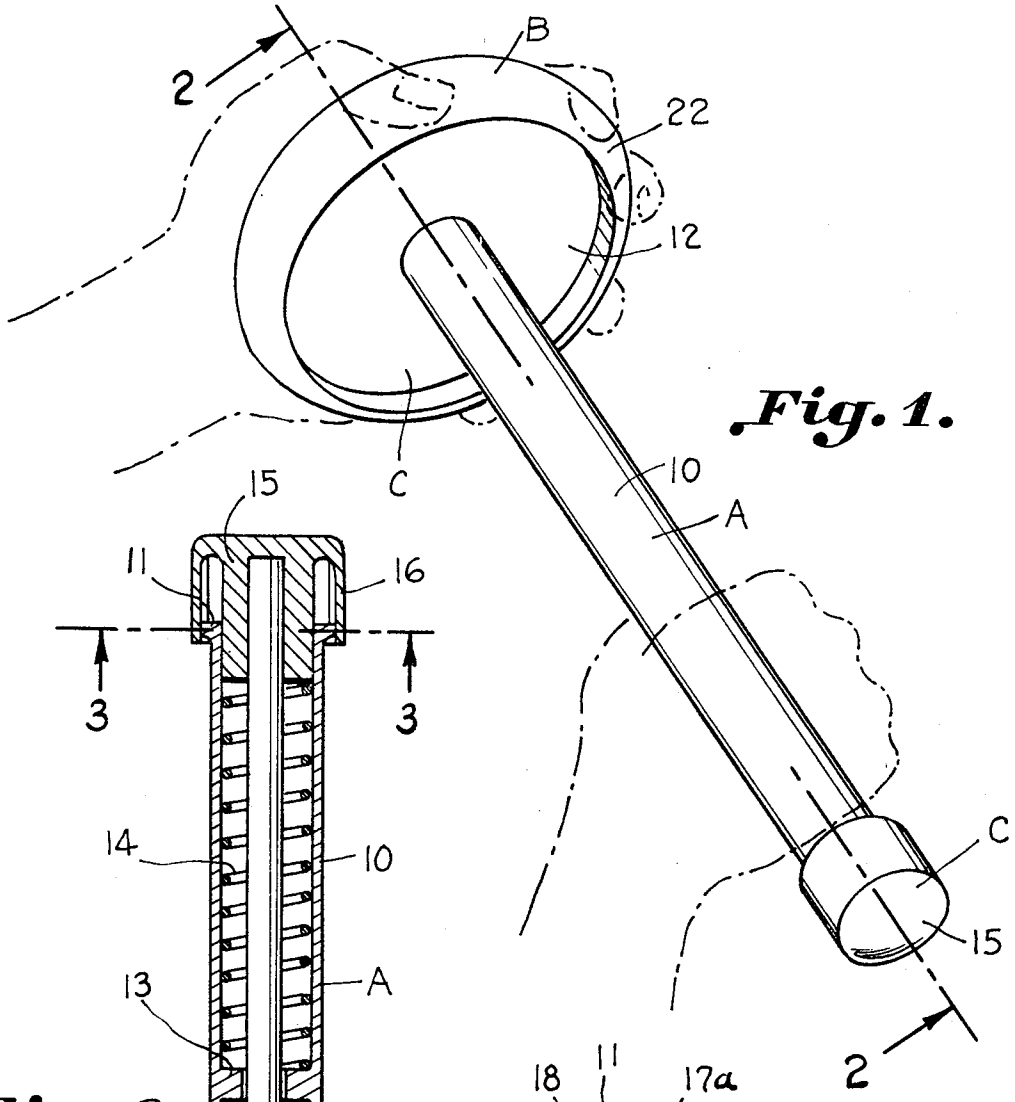


Fig. 1.

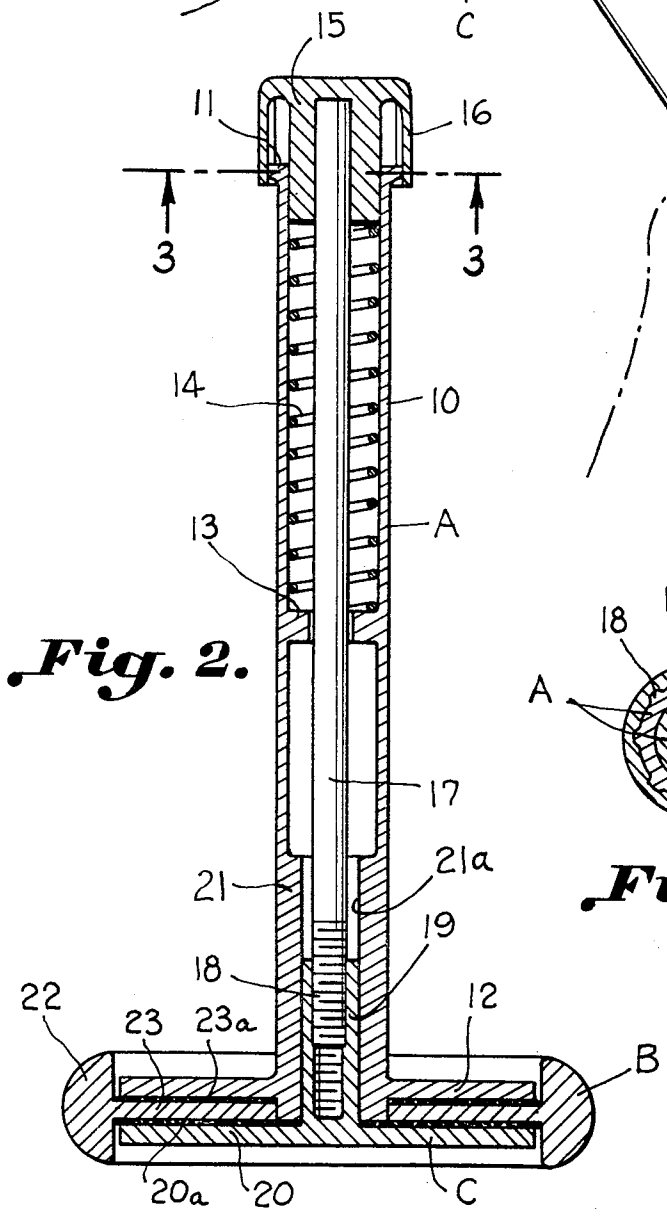


Fig. 2.

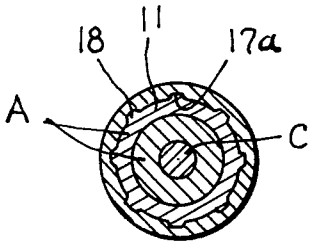


Fig. 3.

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WRIST EXERCISER

This invention relates to an improved wrist exerciser especially adapted to provide exercise to strengthen the wrist for playing golf and the like, where one of the hands is to be moved at right angles to the palm and forearm, whereas, the other hand is to be moved in the plane of the extended palm and in the plane of the forearm.

Heretofore, wrist exercising devices have been supplied wherein both wrists are exercised in the plane of the palm and forearm, such as illustrated in U.S. Pat. No. 684,117. Such devices contemplated two hand pieces with a friction producing means therebetween. A similar device is illustrated in U.S. Pat. No. 3,396,967 except that both wrists are exercised by turning in a direction at right angles to the palm and the forearm, the latter device comprising two bar portions joined by a friction and force producing member.

The present invention contemplates the use of a bar for accommodating the palm of one hand, carrying an enlarged member at right angles to the bar for accommodating the palm of the other hand with a friction producing means therebetween resisting relative movement between these members.

Accordingly, it is an important object of this invention to provide an exerciser capable of exercising the wrist of one hand in one direction and the wrist of the other hand at right angles thereto, such as would be the case with the golf shot, baseball and others. The grip of both hands is also exercised so as to be improved.

Another important object of the invention is to provide a hand, wrist and arm exerciser which may be easily constructed for economical use, and capable of exercising the wrist in the same plane as the wrist or palm. Either hand may be exercised in this fashion by changing hands on the device.

The construction designed to carry out the invention will be hereinafter described, together with other features thereof.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawing forming a part thereof, wherein an example of the invention is shown and wherein:

FIG. 1 is a perspective view illustrating a wrist exerciser constructed in accordance with the present invention in the hands of a user,

FIG. 2 is a longitudinal sectional elevation of the wrist exerciser, and

FIG. 3 is a transverse sectional elevation taken on the line 3—3 in FIG. 2.

The drawing illustrates a wrist exerciser having an elongated bar A adapted to receive a user's clenched hand thereabout with a first palm extending along the longitudinal axis of the bar. An enlarged member B is carried adjacent an end of the bar at right angles thereto adapted to receive a user's other hand with a second palm at right angles to said first palm, and with the fingers adjacent the periphery thereof. A friction producing means C carried between the bar and the enlarged member opposing a force exerted by the hands tending to turn the bar with respect to the member. Thus, the wrist of the clenched hand is exercised in a direction at right angles to the first palm, while the wrist of the other hand is exercised in the plane of the second palm much as would be the case in executing a golf shot and the like.

The elongated bar A includes a tubular sleeve **10** having an upper rim **11** and a lower flange **12** integral therewith. The tubular member **10**, also, has a seat portion **13** for accommodating the compression spring **14** on one end. The spring is confined by a cap **15**, which has a depending flange **16** which is notched as at **17a** to receive projections **18** carried by the upper rim **11**. The cap **15** carries a longitudinal shaft **17** which is threadably secured as at **18** to an internal bore within a sleeve **19**. The sleeve **19** is secured to a disc **20** carried integrally at right angles thereto. The sleeve **19** is received within a restricted lower portion **21** of the sleeve **10**. Preferably, the restricted lower portion **21** has an opening **21*a***, rectangular or otherwise, therein to receive corresponding sleeve **19** to prevent rotation therebetween.

The enlarged member B is a wheel having a rim **22** carried by a flat web **23**. The web of the disc **20** and the web **23** carry leather portions **20*a*** and **23*a***, respectively, and these and associated parts form the friction producing means C for receiving the enlarged member B.

It will be observed that the bar consists essentially of the round tubular element **10**, and that the wheel has a rim carried by a flat web which is confined by the friction producing means C, which includes a pair of spaced spring biased discs confining the flat web **23** therebetween and resiliently bearing thereagainst. The compression spring **14** urges the shaft **17** upwardly resiliently confining the web **23** between the disc **20** and the flange **12**. The leather portions **20*a*** and **23*a*** tend to produce a friction force tending to resist forces which would result in rotation between the rod and the wheel. The cap **15** is carried fixedly by the shaft **17**. By turning the cap against the notches **17*a*** the threaded end of the shaft is turned to go further into or out of the sleeve **19**. Thus, the spring **14** is shortened or lengthened to increase or decrease the friction between the wheel and the shaft.

While a preferred embodiment of the invention has been described using specific terms, such description is for illustrative purposes only, and it is to be understood that changes and variations may be made without departing from the spirit or scope of the following claims:

What is claimed is:

1. A wrist exerciser comprising, an elongated bar adapted to receive a user's clenched hand thereabout with a first palm extending along the longitudinal axis of the bar, an enlarged member carried adjacent an end of the bar at right angles thereto adapted to receive a user's other hand with a second palm at right angles to said first palm and with the fingers adjacent the periphery thereof, resilient means for yieldingly biasing at least one of said bar and enlarged member toward the other, and friction producing means carried between the bar and the enlarged member and actuated by said resilient means to oppose a force exerted by the hands tending to turn the bar with respect to the member, whereby the wrist of the clenched hand is exercised in a direction at right angles to the first palm while the wrist of the other hand is exercised in the plane of the second palm much as would be the case in executing a golf shot and the like.

2. The wrist exerciser set forth in claim **1**, wherein said bar has a round cross-section, wherein said enlarged member is a wheel having a rim carried by a flat web, and wherein said friction producing means includes a pair of spaced spring biased discs confining the flat web therebetween and resiliently bearing thereagainst.

3. The wrist exerciser set forth in claim **2**, further comprising: means for increasing or decreasing the biasing force of said resilient means, whereby the opposition to turning may be adjusted.

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