May 5, 1925. 1,536,048

W. U. ALASTALO

HAND BAR FOR PHYSICAL TRAINING

Filed Sept. 17, 1923

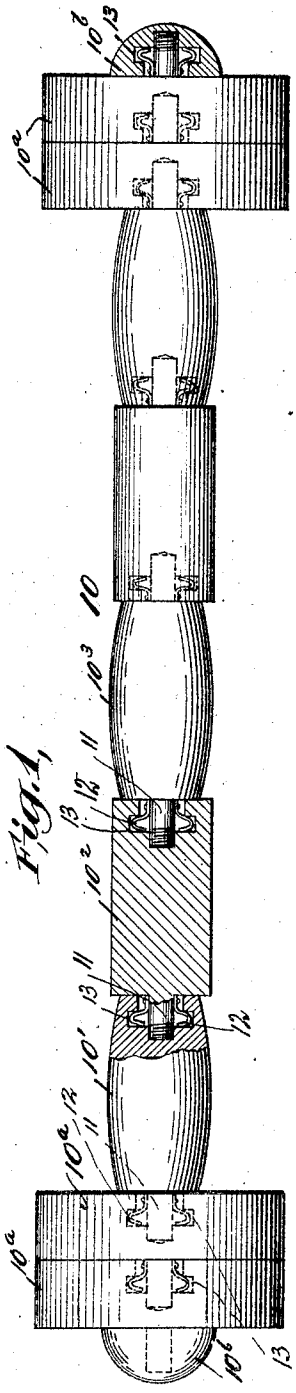


Fig. 1.

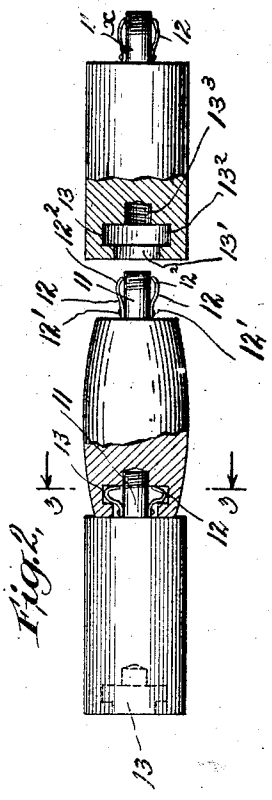


Fig. 2.

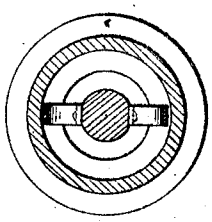


Fig. 3.

Wilfo U. Alastalo INVENTOR

BY

Mark Ordway ATTORNEY

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UNITED STATES PATENT OFFICE.

WILJO U. ALASTALO, OF NEW YORK, N. Y.

HAND BAR FOR PHYSICAL TRAINING.

Application filed September 17, 1923. Serial No. 663,165.

To all whom it may concern:

Be it known that I, WILJO U. ALASTALO, a citizen of Finland, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Hand Bars for Physical Training, of which the following is a specification.

The present invention relates to hand bars for physical training and has for its object to provide a bar, which can be enlarged or reduced at will to suit different exercises and persons using them.

Another object is to so construct the bar that its units can be quickly and easily joined to or separated from one another and when joined be securely locked in position.

One embodiment of my invention is illustrated in the accompanying drawing in which similar references denote corresponding parts and in which Fig. 1 is an elevation of my device partly in section; Fig. 2 shows in sectional elevation the units partly separated and joined and Fig. 3 is an enlarged cross section on line 3—3 of Fig. 2.

The bar 10 to be used as hand bar for physical training is composed of individual units $10'$, 10^2, 10^3, including weights 10^a and end or head pieces 10^b all of steel or other heavy and rigid material. Each unit, except the end pieces 10^b, is formed at one end with a central threaded bolt 11 and one or more spring members 12 in form of curved plates of resilient material extending axially relative to the bolt and fixed to the latter at the inner end, as at $12'$. The free end of each spring member is curved toward the bolt, as at 12^2, to form a rounded surface. The opposite end of each unit is provided with a central bore 13, which comprises an outer or mouth portion $13'$, an intermediate widened portion 13^2 and an inner threaded portion 13^3 to receive the bolt. The total length of the bore is about equal to or slightly more than that of the bolt 11 and the diameter of the mouth portion $13'$ is large enough to permit the free passage of the springs 12 in their flattened state, as at x, shown in Fig. 2. Each spring member is so arranged that it does not extend quite to the free end of the bolt 11, so that, after passing the bolt into the bore 13^3, the free end of said spring member will abut against the rear wall of the intermediate portion 13^2 of the bore. Then when one of the units to be joined is turned and the bolt 11 threads in the bore 13^3, the spring member will be compressed into the shape of a hook lodging itself in the annular groove of the intermediate portion 13^2, thereby locking the two units together. The frictional contact between the walls of the groove and springs 12 will guard against accidental slackening of the bolt in the bore 13^3.

A turning in the opposite direction will release the bolt 11 from the threaded portion 13^3 permitting the springs 12 to flatten out as the units are being separated.

In this manner I have found the units can be effectively joined and separated very quickly and easily.

The end of head pieces 10^b may be provided only with groove 13 and serve to give the bar a better appearance.

Of course, the means shown can be modified in many other ways without departing from the principle of my invention. I, therefore, do not wish to restrict myself to any details of construction.

What I claim is:—

A hand bar composed of separable units, each unit being formed at one end with a threaded bolt and resilient means on said bolt, and at the opposite end with a bore having a mouth opening, an intermediate wider portion and a threaded portion to receive the bolt, said resilient means being adapted when two units are drawn together to become lodged in said intermediate portion and thereby lock the units together.

In testimony whereof I affix my signature in presence of two witnesses.

WILJO U. ALASTALO.

Witnesses:

MAX G. ORDMANN,

JOSEPH T. MCMAHON.