

Oct. 28, 1930.

D. C. HALL

1,779,594

EXERCISING DEVICE

Filed Dec. 19, 1929

Fig. 1.

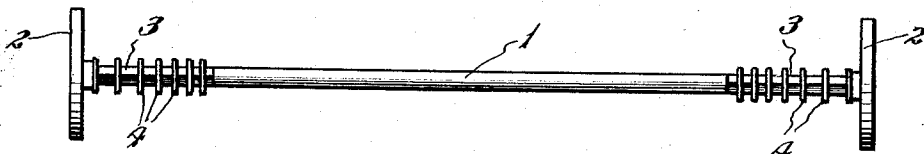


Fig. 4.

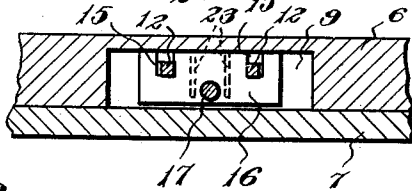


Fig. 2.

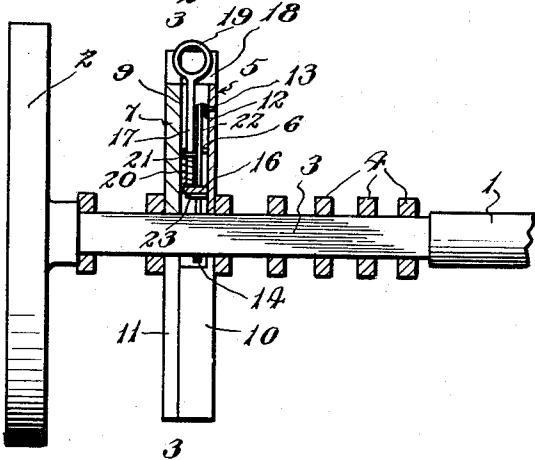


Fig. 3.

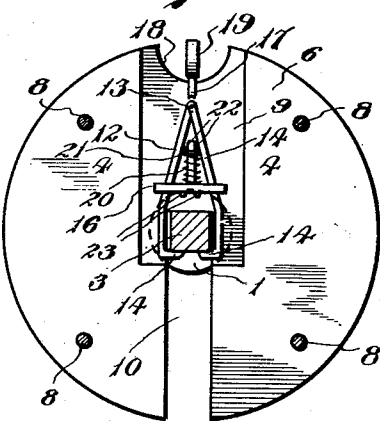
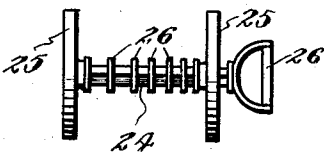


Fig. 5.



D. C. Hall
Inventor

By *Lacey Lacey*
Attorneys

UNITED STATES PATENT OFFICE

DAVID COLLINS HALL, OF DUNEDIN, FLORIDA

EXERCISING DEVICE

Application filed December 19, 1929. Serial No. 415,272.

This invention relates to exercising devices and more particularly to an exercising device known as a bar bell, although the invention may be embodied in a dumb bell or kettle bell. At the present time bar bells are in use having weights removably mounted upon the end portions of its bar but these weights are slid longitudinally of the bar into and out of place thereon and secured by a set screw or other suitable securing means. This makes it difficult to remove the weights or apply additional weights to the bar as weights near the extreme ends of the bar must be removed before inner weights can be taken off or set in place in their proper positions.

Therefore, one object of the invention is to provide a bar bell or dumb bell in which the weights may be individually applied or removed without disturbing other weights already in place upon the bar.

Another object of the invention is to so form the weights that when they are not in use they may be set on edge in a box or equivalent holder instead of being stacked in a pile upon the floor and thereby allow weights to be removed from the box applied to the bar without disturbing other weights not in use. This eliminates a great deal of shifting of weights and resulting noise which takes place when heavy metal weights are piled one upon another.

Another object of the invention is to provide the weights with securing means for releasably holding them upon the bar having actuating means adapted to serve as a handle and permit the weight to be very easily lifted off the bar or set in place thereon.

Another object of the invention is to so construct the weight and its securing means that the securing means will be disposed within the weight where it will be shielded and prevented from becoming broken.

The invention is illustrated in the accompanying drawing, wherein

Figure 1 is a view showing the improved bar bell in side elevation with the weights removed,

Figure 2 is an enlarged view of one end por-

tion of the bar bell with a weight applied thereto and shown in section,

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a fragmentary sectional view through a weight taken on the line 4—4 of Fig. 3, and

Fig. 5 is a side elevation of a kettle bell formed in accordance with this invention.

The bar bell shown in Figure 1 consists of a bar 1 which may be of any length desired and at its ends carries disks 2 which are preferably rotatably mounted upon the bar so that the bar when resting upon a floor may be rolled along the same either for convenience in moving the bar bell when not in use or for the purpose of pushing the bar bell along the floor when taking exercises. The end portions 3 of the bar are rectangular in cross section and upon these end portions of the bar are disposed a number of disks 4 which are welded or otherwise firmly secured in spaced relation to each other. These disks constitute partitions which divide the end portions of the bar into seats of various widths and between these partitions are to be disposed weights 5 which are of such thicknesses that they fit snugly upon the bar between the partitions. It will thus be seen that the weights have special seats to receive them and when they are applied in their proper positions the bar bell will be evenly balanced. These weights are of less diameter than the disks 2 and, therefore, the bar bell may be rolled along a floor without the weights contacting with the floor. Therefore, there will be no danger of actuating elements or securing means for the weights striking the floor and also the weights may be applied to the bar bell without striking the floor.

Each of the weights is constructed as shown in Figures 2, 3 and 4, and referring to these figures it will be seen that each weight consists of a main disk or body portion 6 and an auxiliary disk 7 which is secured to the main disk by screws 8 and serves as a closure for the open side of a pocket 9 formed in the main disk. Registering slots 10 and 11 are formed radially of the two disks in alinement

with the pocket 9 and at their inner ends these slots communicate with the inner end of the pocket but the pocket is of greater width than the slots, as clearly shown in Figure 3. By this arrangement the weight may be applied to the bar, as shown in Figures 2 and 3, with the bar seated in the inner ends of the slots and extending through the inner end portion of the pocket. Therefore, the weights may be individually applied or removed from the bar without disturbing other weights in place thereon and it will also not be necessary to remove the disks 2 in order to apply or remove weights.

In order to releasably secure the weights, there has been provided securing means mounted in the pockets of the weights. The securing means for each weight consists of grapples 12 which extend longitudinally in the pocket and have their upper or outer ends pivotally mounted by means of a pin 13 and their inner ends bent to form hooks 14 which engage beneath the bar, as clearly shown in Figure 3. The shank portions of the grapples extend through slots or recesses 15 formed in a spreader plate 16 which extends between the grapples above the inner ends of the slots 10 and 11 and this spreader plate is provided with a handle 17 which projects upwardly into a recess 18 formed in the periphery of the weight at the open end of the pocket and terminates in an eye or equivalent hand-hold 19 by means of which the handle may be easily grasped and drawn outwardly in order to move the spreader plate outwardly and cause the grapples to be swung apart out of engagement with the bar. A spring 20 is disposed about the handle with its lower or inner end bearing against the spreader plate and its upper end contacting with a washer 21 which bears against abutment pins 22 projecting from the fixed side wall of the pocket at opposite sides of the handle. By this arrangement the spreader plate and handle will be yieldably held against outward movement and when the handle is released after setting a weight in place upon the bar the handle and spreader will be moved inwardly until the spreader plate contacts with abutment pins 23 and the grapples are again engaged about the bar to securely but releasably hold the weight in place upon the bar. It will thus be seen that the weight has been provided with securing means having an actuating handle serving not only as means to actuate the securing means for the weight but also as a handle by means of which the weight may be easily lifted out of a box or other receptacle in which it is stored when not in use and applied to the bar or removed from the bar and returned to its storage receptacle.

When the bar bell is in use, a selected number of weights are applied to its end portions between the partitions 4 and when they are set in place and the handles released the

securing means or grapples will engage about the bar and firmly hold the weights in place thereon. The bar can then be grasped intermediate its ends and used for exercising purposes in the usual manner. A dumb bell formed in accordance with this invention will be of the same construction as the bar bell except that its bar will be shorter and smaller weights will be employed.

The kettle bell shown in Figure 5 is similar in construction to the bar bell and dumb bell and consists of a bar 24 which is rectangular in cross section and carries disks 25 corresponding to the disks 2. At one end the bar 24 carries a handle 26 by means of which the kettle bell may be lifted when in use. Disks or partitions 27 corresponding to the partitions 4 are fixed upon the bar 24 in proper spaced relation to each other and between these partitions are to be applied weights which are similar in construction to those previously described. While the disks and weights have been shown circular, it will be understood that they may be rectangular, hexagonal or any other shape desired.

Having thus described the invention, I claim:

1. An exercising device comprising a shaft having a portion non-circular in cross section, disks carried by said shaft adjacent its ends, partitions fixed upon the non-circular portion of said shaft in spaced relation to each other, and weights fitting upon said shaft between said partitions and releasably secured thereon.
2. An exercising device comprising a shaft having a portion non-circular in cross section, disks carried by said shaft adjacent its ends, partitions fixed upon the non-circular portion of said shaft in spaced relation to each other, weights fitting upon said shaft between said partitions and having slots opening through their margins to facilitate application and removal of the weights, and means carried by said weights to secure the same upon the shaft.
3. An exercising device comprising a shaft, disks carried by said shaft to rest upon a floor and support the shaft in an elevated position, partitions carried by said shaft and spaced from each other longitudinally thereof, and weights fitting upon said shaft between said partitions.
4. An exercising device comprising a shaft, disks carried by said shaft to rest upon a floor and support the shaft in an elevated position, partitions carried by said shaft and spaced from each other longitudinally thereof, weights fitting upon said shaft between said partitions and each formed with a slot leading from its margin to permit application and removal of the weight, and means carried by each weight to releasably secure the weight upon the shaft.
5. An exercising device comprising a shaft,

disks carried by said shaft to rest upon a floor and support the shaft in an elevated position, partitions carried by said shaft and spaced from each other longitudinally thereof, weights fitting upon said shaft between said partitions and each formed with a slot leading from its margin to permit application and removal of the weight, and means to releasably secure each weight constituting a lifting handle for the weight.

6. An exercising device comprising a shaft, disks carried by said shaft to rest upon a floor and support the shaft in an elevated position, partitions carried by said shaft and spaced from each other longitudinally thereof, weights fitting upon said shaft between said partitions and each formed with a slot leading from its margin to permit application and removal of the weight, and means carried by each weight to releasably secure the weight upon the shaft consisting of clutches pivoted to said weight above its slot and adapted to extend across opposite side portions of said shaft and engage beneath the shaft, a spreader extending between and slidably engaged with said clutches, a handle for said spreader movable outwardly of the weight to move the spreader in a spreading direction, and means to yieldably resist outward movement of said handle and spreader.

7. An exercising device comprising a shaft, disks carried by said shaft to rest upon a floor and support the shaft in an elevated position, partitions carried by said shaft and spaced from each other longitudinally thereof, weights fitting upon said shaft between said partitions and each formed with a slot leading from its margin to permit application and removal of the weight, each weight consisting of a main section formed with a pocket opening at one end through its periphery and an auxiliary section constituting a closure for one side of said pocket, and clutch means in said pocket to engage said shaft and retain the weight thereon having actuating means accessible through the open outer end of the pocket.

8. An exercising device comprising a shaft, disks carried by said shaft to rest upon a floor and support the shaft in an elevated position, partitions carried by said shaft and spaced from each other longitudinally thereof, weights fitting upon said shaft between said partitions and each formed with a slot leading from its margin to permit application and removal of the weight and also formed with a pocket leading from the inner end of the shaft receiving slot and opening at one end through the periphery of the weight, and means in said pocket to secure said weight upon said shaft having an actuating element accessible through the open end of the pocket.

In testimony whereof I affix my signature.

DAVID C. HALL [L. s.]