

R. C. KEPPLER.
DUMB BELL.
APPLICATION FILED JUNE 29, 1914.

1,119,169.

Patented Dec. 1, 1914.

Fig. 1

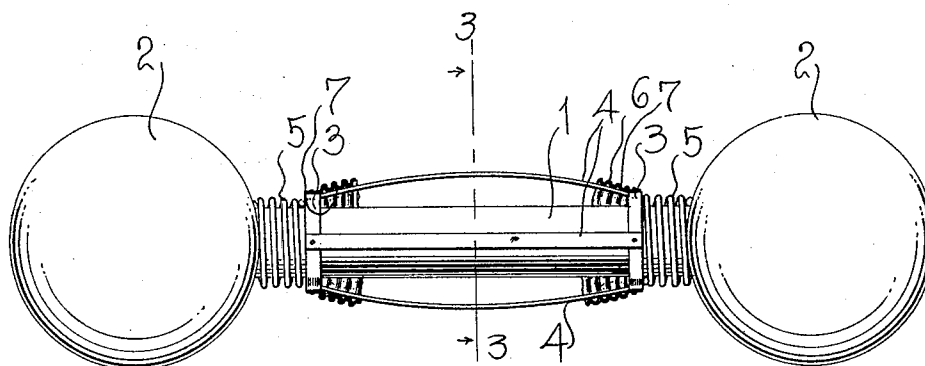


Fig. 3

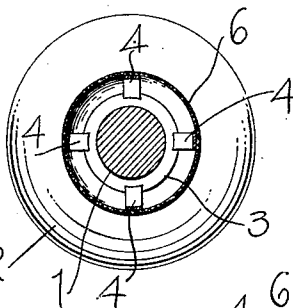
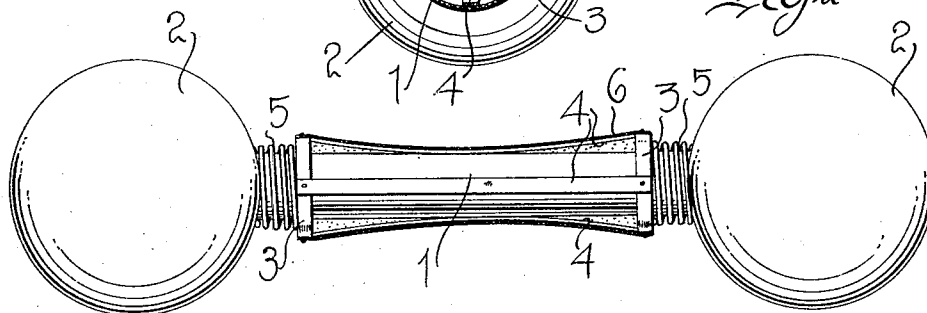


Fig. 2



Inventor
ROY C. KEPPLER

Witnesses
Robert M. Sutphen
A. L. Hind

By *Watson E. Coleman*
Attorney

UNITED STATES PATENT OFFICE.

ROY C. KEPPLER, OF GOSSERHILL, PENNSYLVANIA.

DUMB-BELL.

1,119,169.

Specification of Letters Patent.

Patented Dec. 1, 1914.

Application filed June 29, 1914. Serial No. 848,002.

To all whom it may concern:

Be it known that I, ROY C. KEPPLER, a citizen of the United States, residing at Gosserhill, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Dumb-Bells, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in dumb bells, and particularly to a dumb bell which is provided with a compressible grip on its handle.

An object of this invention is the provision of a dumb bell which is provided with a plurality of flexible springs on the handle thereof, whereby a continuous grip of the hand upon the handle will be necessary to support the dumb bell in a position for use in exercise, so that all of the muscles of the fingers, the wrists and the arms will be brought into play when the dumb bell is in use.

A still further object of this invention is the provision of a dumb bell consisting of a handle having heads on its opposite ends, the handle having collars slidably mounted thereon adjacent its opposite ends, to which the opposite ends of bowed springs are connected, helical expansion springs being mounted on the handle between the collars and the heads, to normally force the collars toward each other to maintain the bowed springs spaced from the handle.

With these and other objects in view, my invention consists in the novel construction, combination, and arrangement of parts, to be hereinafter more fully described, claimed, and illustrated in the accompanying drawing, in which—

Figure 1 is an elevational view of my improved dumb bell showing the ends of the cover of the springs in section; the intermediate portion of the cover being broken away; Fig. 2 is an elevational view showing the cover in section, and the springs compressed; Fig. 3 is a sectional view on the line 3—3 of Fig. 1.

Referring more particularly to the drawing, the dumb bell consists of a handle 1 upon the opposite ends of which the heads 2 are detachably connected. It will be understood that the heads may be spherical in form or any other desired shape, that the same may be connected to the ends of the

handle by threads, or by any other desired arrangement and construction. Slidably mounted on the handle 1 adjacent its opposite ends are collars 3 to which are connected the opposite ends of outwardly bowed springs 4 which extend longitudinally of the handle, and which are preferably four in number. Mounted on the handle between the heads 2 and the collars 3 are helical expansion springs 5, one end of each spring being mounted in one of the heads and the other end of the spring being mounted in the adjacent collar, so that the springs normally force the collars inwardly and bow the springs 4 outwardly in spaced relation from the handle. To inclose the springs 4 and to prevent the same from pinching the hand when the dumb bell is in use, a tubular covering 6 is disposed over the spring, the opposite end edges of the covering being secured to the periphery of the collars 3, and the covering adjacent its ends being provided with a plurality of annular crimps 7 therein whereby the cover may readily expand upon outward movement of the collars when pressure is applied against the springs 4.

In the practical use of my improved dumb bell, when the handle of the dumb bell is grasped, the compressible springs 4 move inwardly under the pressure of the hand, until the same engage the handle, so that a firm grip upon the handle is necessary to hold the dumb bell in a position for use, whereby the muscles of the fingers, wrists and arms are brought into play. The covering 6 which is of leather or other soft material provides a soft pliable surface to the hand, whereby the springs 4 are prevented from abrading or cutting the skin, and it will be seen that when the springs 4 are forced inwardly against the handle, the collars 3 are moved longitudinally upon the handle, the crimps 7 in the cover allowing the covering to stretch so as to entirely inclose the springs without strain upon the covering. When the collars 3 are moved longitudinally upon the handle, the springs 5 are compressed, so that immediately upon release of the dumb bell, the springs 5 assume their normal positions. Under the tension of the springs 5 the collars 3 are moved inwardly upon the handle to again bow the springs 4 outwardly in a position to be grasped when the dumb bell is again desired for use.

Having thus fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. A dumb bell comprising a handle having heads on its opposite ends, spaced collars slidably mounted on the handle, outwardly bowed springs connected at their opposite ends to said collars, spiral springs mounted on said handle between said heads and said collars, said springs normally forcing said collars inwardly of the handle, and said bowed springs being adapted for movement inwardly against the handle, the inward movement of said bowed springs forcing said collars longitudinally of the handle against the tension of said spiral springs.

2. A dumb bell comprising a handle having heads on its opposite ends, spaced collars slidably mounted upon the handle, outwardly bowed springs connected at their opposite ends to said collars, spiral springs mounted on the handle between said heads and said collars, and an expansible tubular cover inclosing said bowed springs and secured at its opposite end edges to said collars, said cover adjacent its ends having a plurality of annular crimps formed therein to allow expansion of the cover, said cover offering a smooth surface intermediate of its ends for engagement by a hand, whether said collars are in their extended positions or normal positions.

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

ROY C. KEPPLE.

Witnesses:

J. G. ECKMAN,
S. S. STITT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."