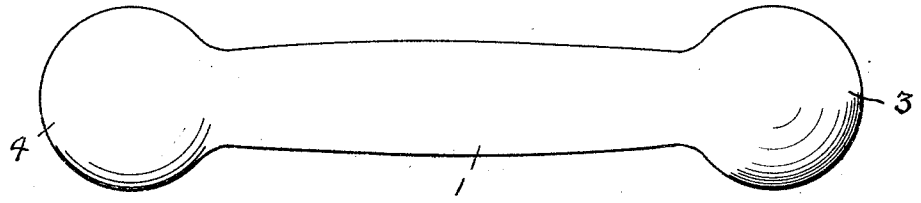
W. TREPANIER.

DUMB BELL.

APPLICATION FILED OCT. 25, 1920.

1,395,313. Patented Nov. 1, 1921.

Fig. 1.



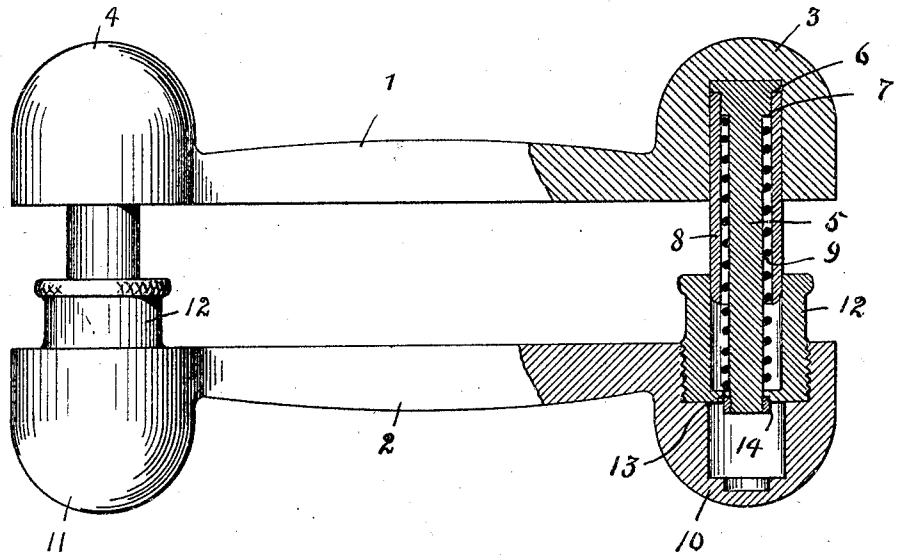


Fig. 2.

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DUMB-BELL.

1,395,313. Specification of Letters Patent. Patented Nov. 1, 1921.

Application filed October 25, 1920. Serial No. 419,453.

To all whom it may concern:

Be it known that I, WILLIAM TREPANIER, a citizen of the United States, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented certain new and useful Improvements in Dumb-Bells, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to improvements in dumb-bells and refers particularly to that class of dumb bells which are formed in two sections having resilient means intermediate thereof which permits the user to grip the two sections in the palm of the hand, squeeze the sections together and then relax, thereby giving excellent exercise to the fore arm, as well as the other physical benefits from the use of an ordinary dumb bell, and which is the principal object of my present invention.

Another object of the invention is to produce a more efficient bell of this character and one which is practically noiseless in operation.

Other objects and advantages of the invention will appear in the further description thereof.

Referring now to the drawings accompanying this application and in which like reference characters indicate like parts:

Figure 1 is a top plan view of my improved dumb bell, and

Fig. 2 is a side elevation, partly in section, of Fig. 1.

The improved dumb-bell consists of two main sections 1 and 2, the general shape of which, when pressed together, is very similar to the ordinary one piece dumb bell regularly used in gymnastic work. The ball like portions 3 and 4 of the section 1 have cylindrical openings therein, into each of which a shaft 5, having two annular shoulders 6 and 7 formed upon the innermost end thereof, is securely held. A small pipe 8 encircles the shaft 5, and one end abuts and is securely fixed to the shoulder 6 of the shaft. Intermediate of the pipe 8 and the shaft 5, and surrounding the latter, is the expansive spiral spring 9, it being of such size as to substantially fill the space intermediate of the pipe 8 and the shaft 5, and yet be easily contracted and expanded therebetween.

The ball like portions 10 and 11 of the section 2 of the dumb bell have screw-threaded therein the cup like journals or sleeves 12, they being slightly enlarged in diameter and knurled at their upper ends so that they may be easily removed manually, as for example when the moving parts of the bell need oiling. The bore of each sleeve is of sufficient size so that the pipe 8, when properly lubricated, may reciprocate back and forth therein. At the lower end of each sleeve is formed an annular shoulder 13, it being designed to support the lower end of the spring 9 and yet allow the shaft 5 to pass entirely through the sleeve when the sections 1 and 2 of the bell are pressed together; the other end of the spring 9 abutting against the shoulder 7 of the shaft 5.

The shaft 5 is screw threaded at its extreme lower end and the small nut 14 is applied thereto, by which means the sections 1 and 2 are held together.

It is to be understood that various modifications of the structure here shown may be resorted to without departing from the spirit of the invention.

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

1. The combination with a two-part dumb bell of the class described, having means therebetween for yieldably holding the sections together; of a rigidly united shaft and tube securely fixed in the ball like portions of one of the sections, expansive helical springs intermediate of the shaft and tube, and sleeves screw-threaded into the ball like portions of the other sections through which the shaft and tube slidably reciprocate and in which the shaft is held against dislodgement.

2. The combination with a two part resilient dumb bell of the class described, of a shaft and tube fixed in each ball portion of one part of the bell, a cup like sleeve fixed in each ball portion of the other part of the bell, the shaft being reciprocable through the sleeve, and the tube reciprocable only within the sleeve, an expansive spiral spring within the tube surrounding each shaft and impinging against the inner end of the sleeve and means for holding the shaft against dislodgment from the sleeve.

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

WILLIAM TREPANIER.

Witnesses:

S. C. BRONSON,

S. GEO. STEVENS.