B. S. WHITNEY.

DUMB BELL.

APPLICATION FILED JUNE 11, 1908.

916,813. Patented Mar. 30, 1909.

Fig. 1.

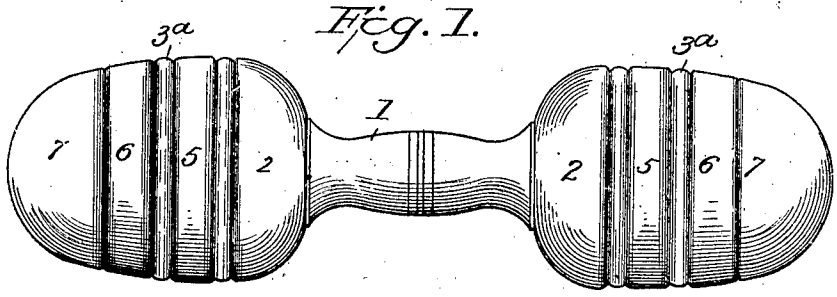


Fig. 3.

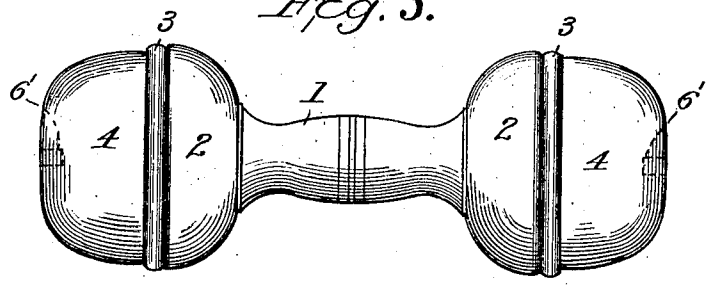


Fig. 2.

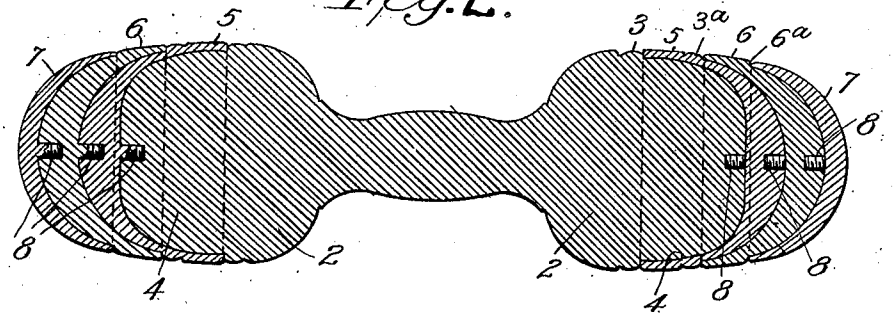
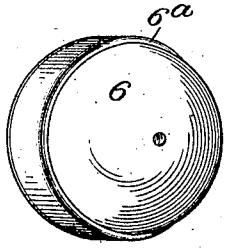


Fig. 4.



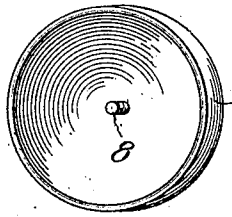


Fig. 5.

Witnesses

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DUMB-BELL.

No. 916,813. Specification of Letters Patent. Patented March 30, 1909.

Application filed June 11, 1908. Serial No. 437,958.

To all whom it may concern:

Be it known that I, BYRON S. WHITNEY, a citizen of the United States, residing at Putnam, in the county of Windham and State of Connecticut, 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 dumbbells, and has for its object, the improvement of the construction of a dumbbell, which can be quickly increased in size or weight, by the addition of a section or sections.

Another object of the invention is the construction of detachable sections for the ends of a dumbbell, which sections can be quickly attached or detached at the will of the operator.

It is to be noted that when exercising with dumbbells, the operator usually takes light weight ones at first, and after exercising a few days, a heavier dumbbell is needed, and to obviate the cost of buying several pairs of dumbbells of different weights, I have provided a novel and simple section, which can be quickly attached to the end or ends of the dumbbell and increase the weight thereof, as the muscles of the operator or user become strong or require a heavier device.

Therefore, a further object of the invention is the construction of a dumbbell, which comprises a minimum number of parts, is simple in structure, and comparatively inexpensive to manufacture or construct.

With these and other objects in view, the invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a view, in side elevation, of a dumbbell constructed in accordance with the present invention, and showing a plurality of detachable sections assembled at its ends. Fig. 2 is a longitudinal, sectional view of the structure depicted in Fig. 1. Fig. 3 is a view in side elevation of the body of the dumbbell or the dumbbell *per se*, before a section or sections is attached. Fig. 4 is a perspective view of one of the sections, looking at its outer end, and Fig. 5 is a perspective view looking at the inside thereof.

In the following specification and claims, I refer to the dumbbell, which is first employed, (or to which is secured the detachable sections) as the body, for it is to be noted that my complete dumbbell comprises the body provided with a section or sections of the peculiar structure hereinafter specifically described. Therefore, the body comprises the grip portion 1, to the ends of which are secured the ball or spherical portions 2. Each spherical portion is provided with an annular bead 3, which is of greater diameter than the outer end 4 of the spherical portion, whereby the inner cup-like section 5 may be secured upon the spherical portion of the body. The bead 3 on each spherical portion constitutes a shoulder against which the inner end of the cup-shaped inner section rests when the section 5 is secured upon the end. Each end portion of the body or dumbbell *per se* is provided with a threaded socket 6′, which socket 6′ extends longitudinally of the dumbbell or body, and is formed, preferably at the center of the spherical portion. The inner section or sections 5, as well as the intermediate section 6 and outer section 7 is each provided with a short threaded extension or tenon 8, formed integrally with the center of the cup-like section, and the threaded extension is adapted to be threaded into the threaded sockets of either end-portions 4 or the threaded sockets in the intermediate and inner sections 6 and 5 respectively.

It is to be noted that the threaded extensions or tenons are not of very great length, for they do not extend through each section, as this would be impracticable, for each of the inner and intermediate sections 5 and 6, respectively, must be provided with a threaded socket in its outer face and all sockets are formed in alinement or in the same horizontal plane, owing to the cup-like structure of the sections, and to permit the sections to be assembled by threading the same one upon the other or the inner section upon the spherical end-portions of the body or dumbbell *per se*.

Inasmuch as the bead 3 on each of the

spherical ends of the body portion constitutes a shoulder, the bead 3^a on the inner section 5 also constitutes an annular shoulder against which the inner edge of the intermediate section bears, when it is screwed tightly upon the inner section, at each end of the body. The intermediate section, at each end, is provided with an annular shoulder 6^a, against which the inner end of the outer section 7 bears, therefore, producing an ornamental and artistic effect, when all the sections are assembled, and decreasing the likelihood of the sections being detached by striking against a foreign object, for when all the sections are attached, the outer faces of the sections of the dumbbell are positioned in the same curved plane, without having any one of the outer surfaces of the sections projecting a sufficient distance above the outer surface of the other section for causing a foreign object to hit against the same and weaken the connection; the screw-threaded structure of the connection between two contiguous sections, or between the inner section and the body, being sufficient for securely holding the sections together. Therefore, while these sections or attachments are secured to either end, the dumbbell or body still remains in symmetrical and desirable form.

It is to be noted that the annular beads 3 and 3^a constitute shoulders or flanges, as well as the shoulders 6^a, and that these beads or shoulders perform the function of a stop, whereby any sudden strain, as for instance, a knock, hit, or stroke upon the ends of the cup-like sections, will not cause the same to split, as the inner ends bear against the shoulders for preventing any splitting action by the dumbbell falling, or a person striking the same against the wall, etc., thereby greatly strengthening the structure.

What I claim is:

1. A device of the character described, comprising a body portion provided with solid, spherical end-portions, one of the end-portions provided with a short threaded socket, a hollow cup-shaped section provided with an inner, smooth, rounded face and with an integral threaded tenon extending from the inner face and near the center of said section, and said tenon adapted to be threaded in the short socket, for securing the cup-shaped section upon the side-faces of the spherical end-portion.

2. In a device of the character described, the combination of a body provided with end portions, each end portion provided with a short threaded socket at its center, cup-like sections positioned upon the end-portions, each cup-like section provided with a threaded tenon or extension, near its center, each cup-like section provided near its center with a short threaded socket, and cup-like sections provided with means engaging the threaded sockets of the first-mentioned sections for securing the last-mentioned sections thereon.

3. A device of the character described, comprising a body portion provided with spherical-like end-portions, each end-portion provided at its outer end and near its center with a short threaded socket, an inner section positioned upon each end-portion, each inner section provided with a short threaded tenon extending into the threaded extension of the end-portion, each inner section provided with a threaded socket formed in the same plane with the socket of the end-portion, a section placed upon each of the inner sections and provided with means extending into the threaded socket of the inner section for securing the last-mentioned section to the inner section.

4. A device of the character described, comprising a body portion provided with end-portions, a plurality of sections placed one upon the other and positioned upon each end portion, and each section provided with a threaded tenon or extension integral therewith and projecting from its inner face.

5. A sectional dumbbell, comprising a body provided at each end with a plurality of cup-shaped, detachable sections, and means detachably securing each two contiguous sections together independent of the other sections, and means securing each inner section to the end of the body independent of all of the securing means of the other sections, whereby one of the sections may be detached from the other sections, without separating the other section or sections from its assembled position.

6. A device of the character described, comprising a body provided with spherical end-portions and each end-portion provided with an annular bead, a cup-shaped inner section positioned upon each of the spherical end-portions and having its inner edge engaging the bead, said cup-shaped inner section provided with an annular bead, an intermediate section positioned upon the inner section and engaging said annular bead, said intermediate section provided with an annular shoulder, an outer section positioned upon the intermediate section and having its end engaging the annular shoulder, and means detachably and separately securing one section upon the other section and the inner sections upon the spherical end-portions.

7. A device of the character described,

comprising a dumbbell provided with threaded recesses at its ends, dished or cup-like sections placed upon said ends, each section provided in its outer portion with a threaded socket and on its inner portion with a threaded extension or tenon, the tenon extending into the threaded recess of the dumbbell, sections positioned upon the first-mentioned sections, and means detachably securing all of the cup-like sections together.

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

BYRON S. WHITNEY.

Witnesses:
ELBERT L. DARBIE,
HARRY E. BACK.