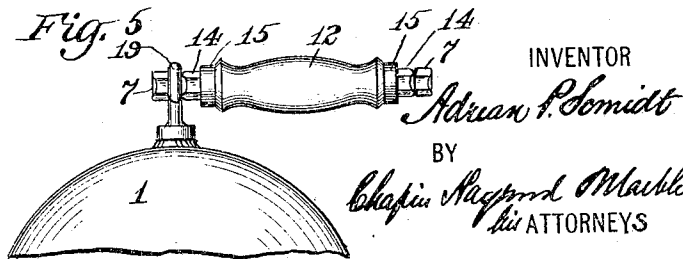
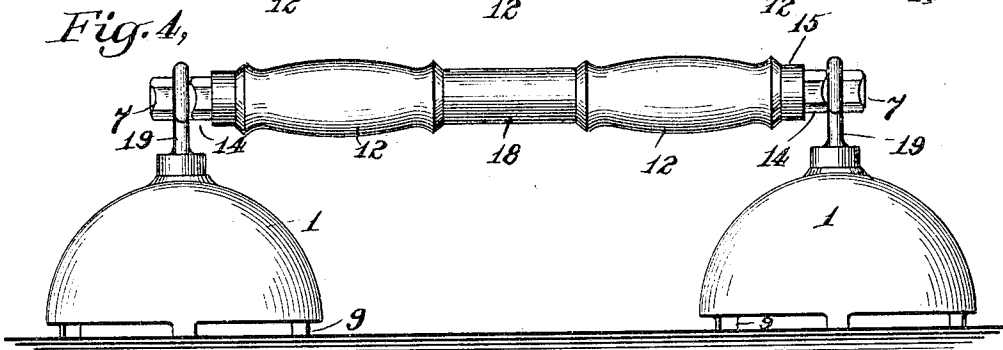
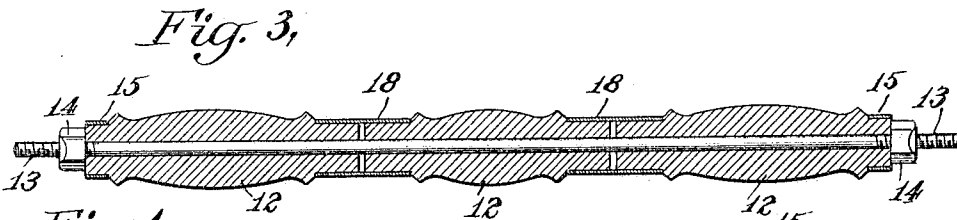
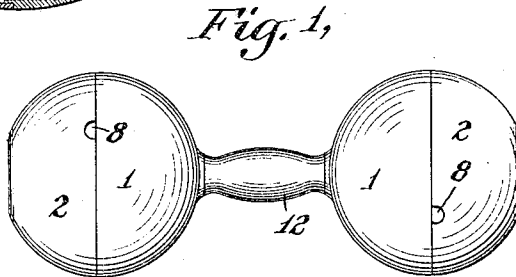
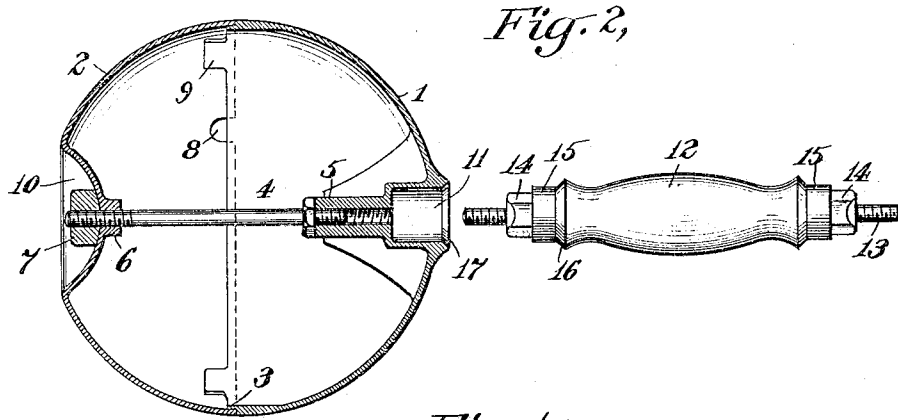


No. 793,101.

PATENTED JUNE 27, 1905.

A. P. SCHMIDT.
DUMB BELL.

APPLICATION FILED JAN. 30, 1905.



WITNESSES:

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ADRIAN P. SCHMIDT, OF NEW YORK, N. Y.

DUMB-BELL.

SPECIFICATION forming part of Letters Patent No. 793,101, dated June 27, 1905.

Application filed January 30, 1905. Serial No. 243,357.

To all whom it may concern:

Be it known that I, ADRIAN P. SCHMIDT, a subject of the German Emperor, and a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Dumb-Bells, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to improvements in dumb-bells, and particularly to dumb-bells which may be adjusted for various uses and varied as to weight.

The main objects of my invention are to construct a dumb-bell having hollow metal heads, which may be loaded with shot as desired in such a form that there will be no projecting corners or portions such as might injure the user or catch in clothing or the like; to simplify the construction of the same, whereby it will be inexpensive to manufacture; to render the device readily adjustable for different lengths of handle and also so adjustable that it may be used in a stationary form as a low horizontal bar; to improve the construction of the handle so as to strengthen the same, preventing warping thereof, and to provide for the ready attachment and removal of the handle, all as will be fully set forth hereinafter.

To these ends my invention consists in certain novel details of construction and combination of parts, as will now be specifically pointed out with reference to the accompanying drawings.

In the drawings, Figure 1 is a view in side elevation of a dumb-bell constructed in accordance with my invention and having a short handle. Fig. 2 is a detail view, in central longitudinal section, of one of the bells removed from the handle, together with a view in side elevation of the handle in position ready to be inserted. Fig. 3 is a view in central longitudinal section of a handle constructed in accordance with my invention and comprising a plurality of members. Fig. 4 is a view in side elevation showing the apparatus arranged as a low horizontal bar, the handle comprising the bar portion and a portion of each of the bells comprising the sup-

port therefor. Fig. 5 is a view in side elevation of the device arranged as a wrist-exercising bell.

The dumb-bell proper comprises three parts—to wit, the handle and the two bells or heads. Each bell or head comprises two members 1 and 2, together forming substantially a hollow sphere. These two members are fitted together, the member 1, preferably provided with a flange 3, engaging the member 2, as shown. The members are secured together by means of a rod 4, screwed into a hub 5, arranged as an integral part of the member 1 and projecting inwardly from the spherical wall thereof, the member 2 having an internally-screw-threaded hub 6 engaging the outer threaded end of the said rod, as shown. A lock-nut 7 may be provided to prevent accidental unscrewing of the member 2. The hub 6 need not be screw-threaded unless desired, in which case the nut 7 will draw the two members together and secure them in place. The bells or heads, being hollow, may be additionally weighted, if desired, by means of shot or the like, and for the purpose of admitting shot I have provided the member 2 with an opening 8. In order then that the opening 8 may be covered after the shot has been admitted, I have provided the member 1 with several projecting lugs 9, any one of which when opposite the opening 8 will entirely close same.

The member 2 has a recessed or reëntrant portion 10, which receives the end of the rod 4 and the lock-nut 7, whereby neither part will project beyond the surface of the bell or head. I have also constructed the member 1 with a socket or recess 11 for receiving the end of the handle and certain parts in connection therewith.

Referring first to the form of handle shown in Figs. 1 and 2, the same comprises a grip 12, made of wood or other suitable material, and a steel tie-rod 13, running through same. This tie-rod is screw-threaded at opposite ends, and nuts 14 secure same in position with respect to the grip. Ferrules 15 may conveniently be employed, as is usual, to prevent the end of the grip from splitting. The projecting ends of the rod 13 may now

be screwed into the hub 5 of the member 1 of each of the two bells or heads to secure the handle in position therewith, the socket 11 being arranged to receive the nut 14 and the ferrule 15, the outer ends 16 of the grip fitting into corresponding tapered portions 17 of the socket, so that when the handle is finally screwed into the head the grip and bell will connect together with continuing curves, as clearly shown in Fig. 1, in order that there shall be no sharp edges or corners to injure the user or catch in the clothing, &c.

By a glimpse at Fig. 1 it will be seen that a dumb-bell constructed in accordance with my invention will present no sharp edges at all and is therefore of the most approved form for such devices.

The dumb-bell as shown in Figs. 1 and 2 is designed as a single-handed dumb-bell; but the dumb-bell may be made a two-handed dumb-bell by merely making the handle of sufficient length. When the handle is made of sufficient length, however, for this purpose, it is not desirable to make the wooden grip portion all in one piece, because in such event it is very likely to warp and twist out of shape, thereby destroying the balance of the device. For this reason I preferably construct a handle of this description of a plurality of separate grip portions, as shown in Figs. 3 and 4, these several grip portions strung upon the tie-rod 13 and connected together by means of nuts 14, exactly as shown for the short handle first described; but I also employ intermediate connecting sleeves or ferrules 18, so as to cover the joints or connecting portions between the several grip members. I may employ two or more grip portions, as I desire, three portions being shown in Fig. 3 and two in Fig. 4.

In Fig. 4 I have shown the device arranged to be used as a low horizontal bar, the handle connected with the members 1 of the bell portion at right angles thereto by means of intermediate couplings 19, set into the sockets 11 and having portions for receiving the ends of the tie-rod 13 transversely therethrough. When so arranged, the members 2 of the heads or bells are removed, together with the rods 4, and the members 1 are then supported upon the ground by means of the lugs 9.

In Fig. 5 I have shown the short handle shown in the first two figures connected to one of the members 1 of one of the bells or heads, whereby the same may be used as a wrist-exercising device. In this case the outer projecting end of the tie-rod 13 may have the lock-nuts 7 fitted thereto, which is removed when the member 2 and rod 4 are removed, so as to prevent such projecting edge doing any injury.

From the foregoing it will be seen that I have provided a dumb-bell capable of adjust-

ment for several purposes. In the first place one of the bells or heads may be removed and may be separately used merely as a heavy spherical weight in the same way as such weights are now used in gymnasiums—as, for instance, in playing "medicine-ball"—and in its employment for kneading the abdomen to reduce adipose tissue. The bell or head may be weighted in the simplest possible manner by merely turning the two members slightly relatively to each other, so as to expose the opening 8, when shot may be admitted and the opening again closed. Two of these heads or bells connect together by a short handle (first shown in Fig. 1) comprising a single-handed dumb-bell of most approved form. A large handle substituted for a short handle makes an ideal two-handed dumb-bell, which may be weighted to any desired extent. For instance, with the heads or bells of eight inches diameter the dumb-bell as a whole may easily be weighted up to about two hundred pounds. Adapted as shown in Fig. 4 it may be employed as a low horizontal bar, and, again, as shown in Fig. 5 it may be employed as a wrist-exercising machine.

It will of course be understood that the foregoing is but one embodiment of my invention and that the same is capable of many modifications within the spirit and scope of my invention.

What I claim is—

1. In a device of the character described, the combination with a hollow dumb-bell head of substantially spherical form composed of two members independently secured together, said head having a screw-threaded socket and a counterbored recess connecting therewith, of a handle having a projecting threaded portion for engagement with the socket, and an end portion fitted to, and arranged to be received within, the counterbored recess.

2. In a dumb-bell, the combination with two hollow heads of substantially spherical form, each composed of two members independently secured together, each said head having a screw-threaded socket and a counterbored recess, of a handle comprising a grip portion, a tie-rod therethrough with extended screw-threaded ends for engagement with said sockets, and nuts on said rod securing the same to the grip portion of the handle, the said nuts and the end portions of said handle fitted to, and arranged to be received within, the said counterbored recesses.

3. In a device of the character described, the combination with a handle, of a hollow head or bell of substantially spherical form arranged to be removably secured thereto, said head comprising two cup-shaped members fitted together in abutting relation, and a tie-rod and lock-nut for securing them

together independently of the handle, one of said members having a reëntrant portion for receiving said lock-nut.

4. In a device of the character described, the combination with a handle, of a hollow head or bell of substantially spherical form arranged to be removably secured thereto, said head comprising two cup-shaped members fitted together in abutting relation, and a tie-rod and lock-nut for securing them together, one of said members having a reëntrant portion for receiving said lock-nut, said members provided at substantially their engaging edges, the one with an opening and the other with a plurality of projecting lips, each adapted, when against same, to cover said opening.

5. In a device of the character described, the combination with suitable bells or heads, of a handle adapted to be secured thereto, said handle comprising a plurality of grip portions arranged end to end, sleeves or ferrules embracing the adjacent ends of said grip portions, a rod extending through said grip portions, and nuts on the ends of the rods

for drawing the grip portions together and securing the tie-rod in place therewith.

6. In a device of the character described, the combination with two heads of substantially spherical form, having each a screw-threaded socket and a counterbored recess, of a handle adapted to be secured thereto, said handle comprising a plurality of grip portions arranged end to end, sleeves or ferrules embracing the adjacent ends of said grip portions, a rod extending through said grip portions, and nuts on the ends of the rods for drawing the grip portions together and securing the tie-rod in place therewith, the ends of said tie-rod extending beyond said nuts and fitted to the screw-threaded sockets in the heads, said nuts and the end portions of said handle fitted to, and arranged to be received within, the counterbored recesses of said heads.

ADRIAN P. SCHMIDT.

Witnesses:

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