

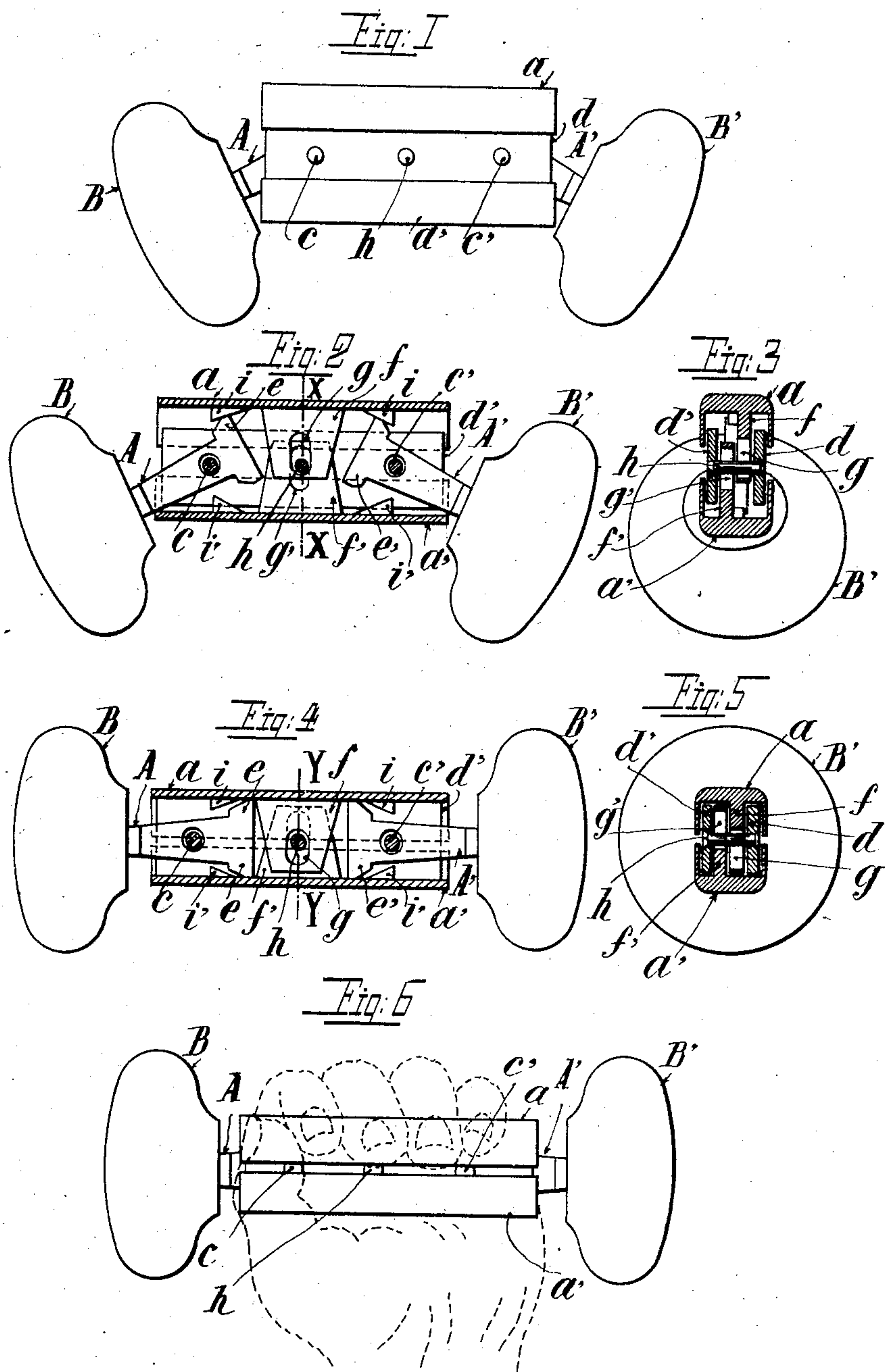
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G. H. SHEPHERD.

DUMB BELL.

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Witnesses

Albert W. Pease.

John A. Jordan.

Inventor

George Henry Shepherd.

per

H. S. Jones

Attorney

UNITED STATES PATENT OFFICE.

GEORGE H. SHEPHERD, OF PARIS, FRANCE.

DUMB-BELL.

SPECIFICATION forming part of Letters Patent No. 786,318, dated April 4, 1905.

Application filed September 12, 1904. Serial No. 224,132.

To all whom it may concern:

Be it known that I, GEORGE HENRY SHEPHERD, a citizen of the Kingdom of Great Britain, residing at No. 1 Rue Caumartin, Paris, in the Department of Seine, France, have invented a new and useful Improved Dumb-Bell, of which the following is a specification.

The present invention relates to improvements in dumb-bells destined for physical exercises and having specially for their object to cause the pupil to grasp vigorously in his hands the bars or handles to which the weights are connected.

It is recognized in practice that the development of the muscles of the arms, of the wrist, and of the hand is much more efficient when the dumb-bell is firmly grasped in the hand during the exercise. This result is obtained according to my invention by making the balls of each dumb-bell separate, connecting to each a short bar which is hinged to a pair of side plates in such a way that the central part of the dumb-bell must be firmly grasped in the hand in order to prevent the moving apart of two parts of the handle by the turning of the bars carrying the balls. It follows that the hand is obliged to exercise an energetic and continuous compression upon the handle containing the bars of the dumb-bell in order to maintain said bars during the exercises in line one with the other.

In the accompanying drawings, Figure 1 shows the dumb-bell in elevation in the position it occupies when the handle is not compressed. Fig. 2 is a vertical section of Fig. 1. Fig. 3 is a section on the line X X of Fig. 2. Fig. 4 is a section of the dumb-bell in the position which it occupies when the handle is compressed. Fig. 5 is a cross-section on the line Y Y of Fig. 4. Fig. 6 is an outside elevation of the dumb-bell with handle compressed.

B B' are the balls of the dumb-bell, and A A' the bars on the ends of which they are mounted. The bars A A' are pivoted on pins c c', respectively, between a pair of cheek-pieces d d'. As the bars A A' oscillate around their pivots c c' they can, by means of their free ends, enlarged in the shape of a hammer e e',

produce a pressure upon the two pieces a a' of the handle covering the cheeks d d'. The two pieces a a' of the handle have each internally a guiding-blade f f', in each of which there is a slot g g'. These blades f f' are engaged between the cheeks d d' in such a manner that the slots g g' are placed in line and permit of the passage therethrough of a pin h, passing between the cheeks d d'. In the interior of the pieces a a' of the handle the respective raised pieces i i and i' i' are formed to receive the pressure of the hammers e e', said pieces having the shape of inclined planes in order to increase the amount of the displacement of the pieces a a' under the pressure of the hammers. By the pressure of the hand upon the two pieces a a' of the handle, Figs. 4, 5, and 6, these latter are caused to maintain the hammers e e' in a definite position between the cheeks d d', in which the longitudinal axes of the bars A A' are in prolongation; but if the hand of the user relaxes its grasp the balls B B' will under the influence of gravity cause the bars A A' to swing upon their pivots c c', and the hammers e e', pressing upon the inclined plane i i, will push upward the piece a of the handle, and at the same time the bars A A' will hold down the piece a, Figs. 1, 2, and 3. The pieces a a' of the handle may thus become separated one from the other as far as the slots g g' permit. On the other hand, if the piece a' of the handle occupies the position of the piece a, Fig. 2—that is to say, if the dumb-bell be turned upside down—then this piece a' will be pushed away by the hammers e e' pressing upon the inclined plane i' i'.

What I claim is—

1. A dumb-bell comprising two independent bars each provided with a heavy ball, means for pivotally supporting said bars, and a handle in two pieces adapted to be spread by the bars when the latter turn on their pivots.

2. A dumb-bell of the type set forth comprising two bars each provided with a weighted ball and pivoted upon an axis supported by a pair of intermediate pieces, a handle of two longitudinal parts covering said intermediate pieces, said parts provided with inclined pro-

jections and with guiding-plates and slots,
and a pin fixed between said two intermediate
pieces and adapted to pass through said slots,
the whole so arranged that by oscillation of
5 said bars upon their axes under the weight of
the balls the ends of said bars will rest upon
said inclined projections and thus push away
one of the parts of the handle tending to re-
move it from the other part, while said slots

limit the displacement of the two parts of the 10
handle.

In testimony whereof I have signed my name
to this specification in the presence of two sub-
scribing witnesses.

G. H. SHEPHERD.

Witnesses:

H. D. JAMESON,
A. NUTTING.