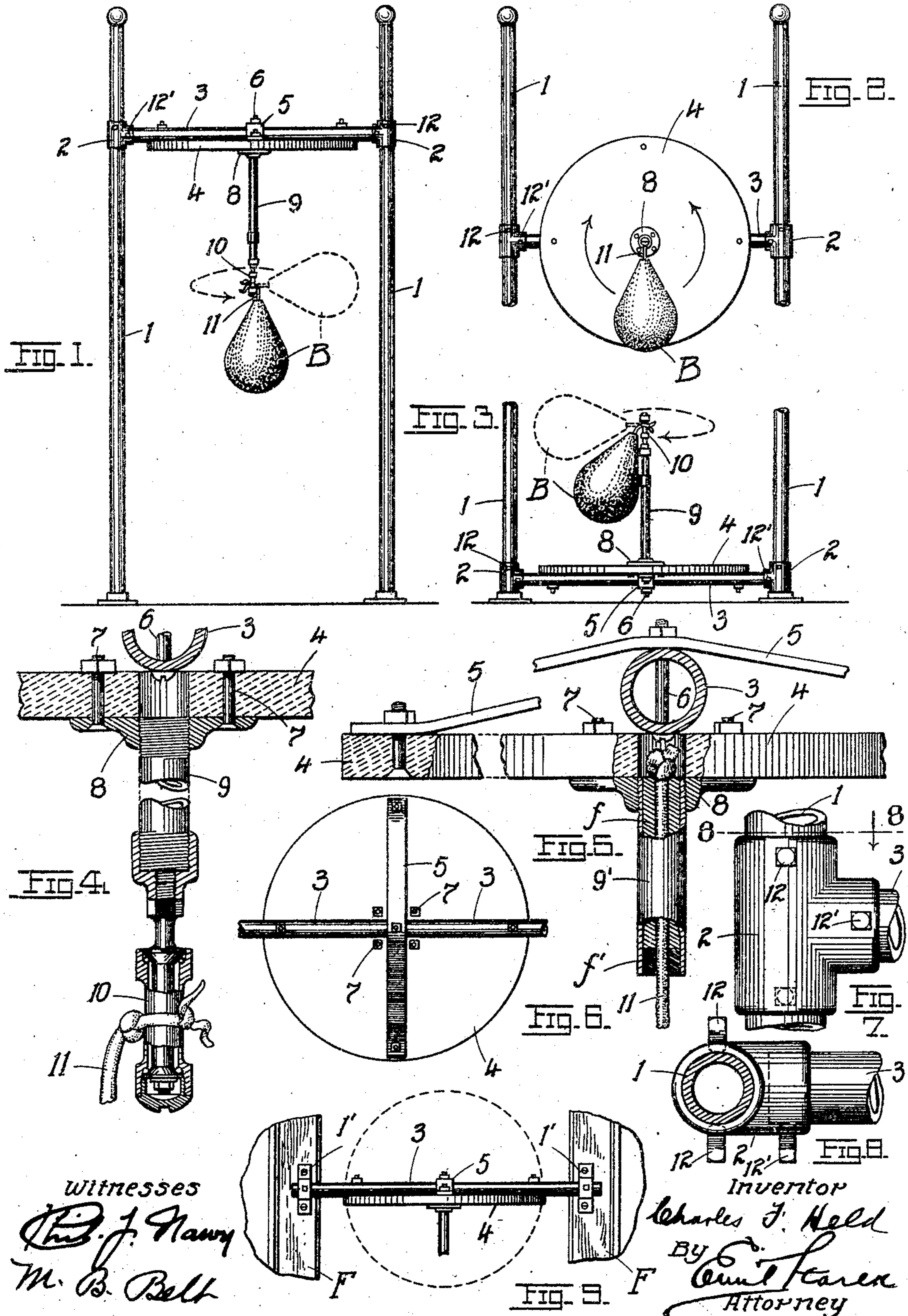


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C. F. HELD.
PUNCHING BAG APPARATUS.
APPLICATION FILED JUNE 20, 1904.

NO MODEL.



UNITED STATES PATENT OFFICE.

CHARLES F. HELD, OF ST. LOUIS, MISSOURI.

PUNCHING-BAG APPARATUS.

SPECIFICATION forming part of Letters Patent No. 775,653, dated November 22, 1904.

Application filed June 20, 1904. Serial No. 213,311. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. HELD, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Punching-Bag Apparatus, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in punching-bag apparatus; and it consists in the novel construction and arrangement of parts more fully set forth in the specification, and pointed out in the claims.

In the drawings, Figure 1 is an elevation of the apparatus, showing the ceiling or disk suspended in a horizontal position. Fig. 2 is a view with the ceiling swung ninety degrees from the first position. Fig. 3 is a view showing the ceiling lowered to the floor and swung one hundred and eighty degrees from its original position, the stem carrying the bag projecting upwardly. Fig. 4 is a sectional detail showing the revoluble bearing by which the bag is carried. Fig. 5 is a detail, partly in section and partly in elevation, showing the construction of the bracework for the ceiling. Fig. 6 is a top plan of the ceiling or disk. Fig. 7 is an enlarged elevational detail showing the sliding T by which the pipe-bar of the ceiling is carried. Fig. 8 is a cross-section on line 8 8 of Fig. 7, and Fig. 9 is a detail showing brackets for securing the ceiling to a door-frame or any vertical wall.

The present invention has for its object the construction of an apparatus which will permit the presentation of the punching-bag along an almost infinite number of angular positions about a permanent axis of suspension, these positions being further qualified in the matter of elevation and the direction in which the bag is permitted to swing, all as will more fully appear from a detailed description of the invention, which is as follows:

Referring to the drawings, 1 1 represent two posts or uprights, along which may be adjusted to any elevation the sliding hollow T's 2, which receive between them the rotatably-adjustable pipe-bar 3, forming one of the diametrically disposed braces of the ceil-

ing or disk 4, from which the bag is suspended. The other brace is in the nature of a strap or truss-bar 5, spanning the pipe 3 and secured at its opposite ends to the disk. The connection between the pipe-bar 3 and truss 5 is effected by a bolt 6, as best seen in Fig. 5. Secured centrally to the opposite face of the ceiling by means of bolts 7 is a nipple 8, to which may be secured the member directly carrying the bag. This member in Figs. 1 to 4, inclusive, is in the nature of a stem 9, to whose free end is secured a revoluble antifric-tion ball-bearing 10, (on the same order as a bicycle pedal-bearing,) said bearing having fastened thereto the thong 11, from which the punching-bag B is suspended. In punching the bag the latter will swing freely about the axis of the bearing and in a plane which is substantially at right angles to the axis of the stem 9. In other words, the bag will swing in a plane parallel with the plane of the ceiling, as shown by the arrows in Figs. 1, 2, 3. The bag may be punched first in one direction and then in the other without making the bag describe a complete circle, or it may be punched so as to swing continuously in the same direction. Without the revoluble bearing 10 the bag could not possibly rotate about its point of suspension, since the thong would simply wind itself about the stem 9 and bring the bag to a standstill.

Where it is desired to hang the bag close to the ceiling so as to cause the latter to serve as the surface against which the bag may impinge and from which it can rebound during the punching operation, the stem 9 is removed and in lieu thereof the short stem or plug or "dead-center" 9' substituted therefor, Fig. 5. In that case the bag as it is struck is punched against the ceiling, from which it is reflected to be again struck by the person exercising, as is obvious. The plug 9' is provided with a wooden filling *f*, terminating in a leaden section *f'*, having a flaring mouth, the soft metal preventing undue wear of the thongs.

From the positions shown in Figs. 1, 2, 3 and from a variety of intermediate positions (not shown) it is apparent that the bag may be brought or adjusted to any elevation or angular position relatively to the body of

the person exercising, permitting an infinite variety of bodily and muscular movements conducive to strenuous exercise and muscular development. The T's 2 are provided with
 5 binding-screws 12 and 12', by which they may be clamped to any elevation along the posts 1 and the pipe-bar 3 turned any desirable degree, according to the angular position to be assumed by the ceiling.

10 To fasten the device to a door-frame F or wall, Fig. 9, I may employ ordinary brackets 1' to carry the opposite projecting ends of the pipe-bar 3, Fig. 9.

Having described my invention, what I
 15 claim is—

1. In a punching-bag apparatus, a revoluble bearing, means for securing said bearing to a fixed support, and a punching-bag adapted to be attached to said bearing and freely
 20 swing about the axis of the same, substantially as set forth.

2. In a punching-bag apparatus, a suitable ceiling, means for adjusting the ceiling vertically and angularly, a stem projecting centrally therefrom, a revoluble bearing carried
 25 by the stem, and a bag suspended from the bearing and adapted to revolve therewith, substantially as set forth.

3. In a punching-bag apparatus, a suitable
 30 ceiling, a revoluble bearing carried thereby, and a punching-bag attached to said bearing and freely revolving therewith, substantially as set forth.

4. In a punching-bag apparatus, a suitable ceiling, a pipe-bar and cross-brace secured
 35 thereto, the ends of the pipe-bar extending beyond the ceiling, means for securing said pipe-bar rigidly to any desired elevation, means for adjusting the ceiling to any angle, a stem projecting centrally from the ceiling,
 40 and a bag suspended from the stem and free to revolve about the same in a plane at right angles thereto, substantially as set forth.

5. In a punching-bag apparatus, a ceiling, a stem projecting rigidly therefrom, and a
 45 terminal bag-supporting revoluble bearing at the free end of the stem, substantially as set forth.

6. In a punching-bag apparatus, a ceiling, suitable braces disposed along one face there-
 50 of, and means for attaching a bag in proximity to the opposite face, substantially as set forth.

7. In a punching-bag apparatus, a ceiling, a pipe-bar and a cross-brace secured to one
 55 face thereof, a stem projecting centrally from the opposite face, and means for securing the opposite ends of the pipe-bar to impart any predetermined inclination to the ceiling, substantially as set forth.

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

CHARLES F. HELD.

Witnesses:

EMIL STAREK,
 MARY B. BELT.