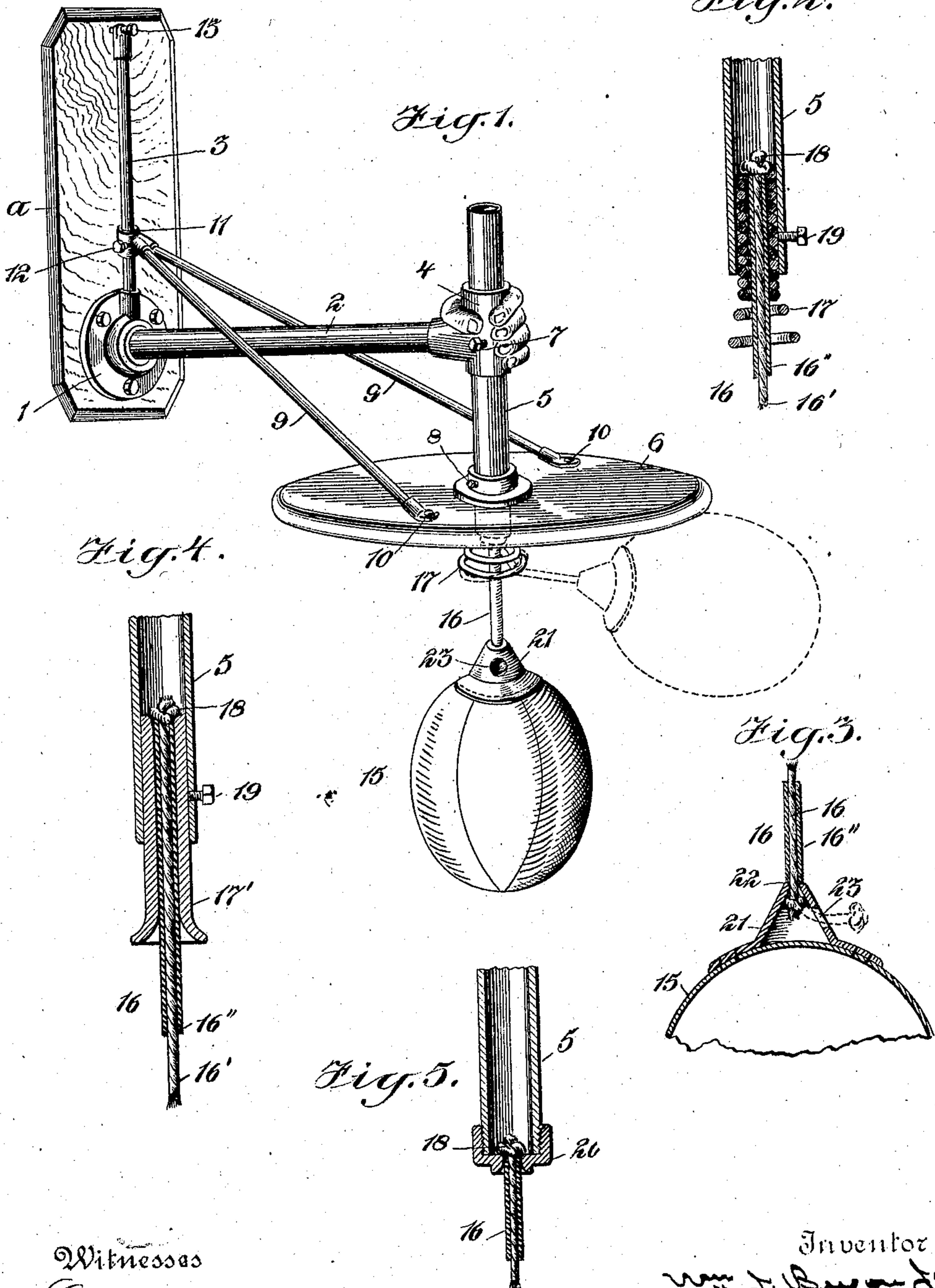


No. 815,677.

PATENTED MAR. 20, 1906.

W. J. BRYON, JR.
PUNCHING BAG APPARATUS.
APPLICATION FILED JULY 24, 1903.



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UNITED STATES PATENT OFFICE

WILLIAM J. BRYON, JR., OF NEW YORK, N. Y.

PUNCHING-BAG APPARATUS.

No. 815,677.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed July 24, 1903. Serial No. 166,824.

To all whom it may concern:

Be it known that I, WILLIAM J. BRYON, Jr., a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Punching-Bag Apparatus, of which the following is a specification.

This invention relates to punching-bag apparatus; and it consists of the novel construction, arrangement, and combinations of parts, as hereinafter set forth in detail, and pointed out in the claims.

Referring to the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a punching-bag apparatus embodying my invention. Figs. 2 and 3 are enlarged sectional details showing the connection between certain of the parts, and Figs. 4 and 5 are enlarged sectional details illustrating modified forms of the invention.

A punching-bag apparatus embodying my invention will preferably comprise a suitable supporting-bracket, a rebounding device supported by said bracket for receiving the impact of the punching-bag, and a punching-bag suspended below the rebounding device through the medium of a flexible connection.

The supporting-bracket, as shown, comprises an attaching-plate 1, having a horizontal arm 2 and a vertical arm 3, the said plate 1 being adapted to be screwed or otherwise secured to a desired support, as the board *a*, and the arms 2 and 3 being adapted to carry and support the several other parts of the apparatus. The arm 2 at its outer end has a T-coupling to provide a sleeve 4 for receiving the stem 5 of the rebounding device 6, the said stem with its several supported parts being held in a vertically-adjustable position relative to the said sleeve by means of a set-screw 7.

The rebounding device 6 may be of any suitable or desired construction, the same, as herein shown, being in the form of an annular disk having a central opening therein to receive the stem 5, on which the disk is secured by suitable fastening means, such means in the present case being a set-screw 8. As the punching-bag in operation strikes against the rebounding device at or adjacent to its outer edge, it therefore becomes necessary, or at least desirable, to so brace the rebounding device at such point as to insure its being rigidly supported to receive the impact of the bag. This is accomplished in the present instance

shown by means of two stay-rods 9 9, which are secured at one end to the rebounding device adjacent to its opposite edges at 10 and at their opposite ends secured to a sleeve 11 on the vertical bracket-arm 3. In lieu of these two stay-rods 9 9 for bracing the rebounding device it will be obvious that only one rod made sufficiently strong might be employed for the purpose, although I prefer to employ the two rods, as shown. In order to permit of the ready adjustment of the rebounding device when thus connected with these stay-rods and without disturbing the connection of the latter therewith the said sleeve 11, with which the stay-rods connect at one end, is mounted to slide upon the bracket-arm 3, so as to be movable in unison with the rebounding device during any vertical adjustment of the same, the said sleeve being normally secured in a stationary position on its supporting-bracket arm by means of a set-screw 12. As the bracket-arm 3 is free at its upper end, I have mounted a screw 13 in a transversely-arranged threaded opening therein, which may be employed to bear against an adjacent support, as the board *a*, and force the arm outwardly against the pressure of the stay-rods, and so operate to support and steady the same. The use of such screw or other similar supporting or steadying means for the upper end of the bracket-arm 3 may be rendered unnecessary, however, by making said arm sufficiently heavy and rigid.

The punching-bag (indicated at 15) is suspended below the rebounding device 6 by a suitable flexible connection 16, which in order to avoid confusion of terms I will hereinafter refer to as a "cord." This cord is supported within the lower end of the stem 5, which is preferably arranged to extend some distance below the rebounding disk, so as to permit of the use of a short cord, and thereby a rebounding disk of relatively small diameter.

As shown in Figs. 1 and 2, I have secured a coiled spring 17 within the lower end of the stem 5, through which the cord 16 is centrally passed and connected at its upper end, the connection of the cord with the spring being effected in the present instance by forming a knot 18 in the cord, which engages with the upper end of the spring, as clearly shown in Fig. 2. This spring 17 at its lower end projects below the stem 5 and is preferably flared outwardly, so as to permit of a free and

unresisted movement of the bag during the initial portion of its swing, but which will be engaged by the cord during the latter part of the swing of the bag and put under more or less tension, the reaction of which will operate to cause a quicker return movement of the bag after striking the rebounding device. In other words, the use of a spring of the proper tension for cooperating with the bag-supporting cord in the manner described causes a quicker or more "snappy" action of the bag than would be caused by a fixed device arranged to so engage with the cord. The spring 17 also constitutes a supporting-head for the bag or bag connection and is adjustable within the stem 5 by means of a set-screw 19, the purpose of such adjustment being to permit the bag to be raised or lowered relatively to the rebounding device, and so render its action faster or slower. Such adjustment of the bag, however, might also be obtained by substituting for the adjustable spring 17 an adjustable sleeve 17', as shown in Fig. 4, or by shortening or lengthening the cord itself, in which latter case the knotted end of the cord would preferably be connected with a cap 20, removably connected with the lower end of the stem 5, as shown in Fig. 5.

The flexible connection 16, which carries the punching-bag, may be of any suitable material or construction; but I prefer to employ a connection comprising a central or core string 16', having an outer covering or sheath 16'', which is preferably in the form of a rubber tube, this tube serving to give a desired degree of stiffness to the connection, so as to avoid turning or "dumping" of the bag when struck on the end or side or other point than the proper one at about the center thereof and cause the same to properly swing away from the user even when so struck. As a further means to steady the bag and cause it to retain its proper position with relation to the cord 16 when in use I have provided it with a conical-shaped cap 21 at its upper end, which is preferably formed of stiff or heavy leather and provided with an opening 22 in the end thereof through which the cord 16 is passed and with a second opening 23 in one side thereof through which the cord may be drawn, as indicated by dotted lines in Fig. 3, for the purpose of either connecting the bag with the cord 16 or disconnecting it therefrom.

What I claim is—

1. A punching-bag apparatus, comprising a supporting-bracket having a horizontally-arranged arm, a rebounding device having a vertically-adjustable connection with said bracket-arm, and a stay-rod connected at one end with the rebounding device and at its opposite end having a vertically-adjustable connection with the supporting-bracket.

2. A punching-bag apparatus, comprising

a supporting-bracket having a horizontally-arranged arm provided with a vertically-arranged sleeve adjacent to one end thereof, a rebounding device having a stem slidably supported in said sleeve, a stay-rod connected at one end with the rebounding device and at its opposite end with the supporting-bracket, and means for holding the rebounding device in a stationary adjusted position relative to the said bracket-arm.

3. A punching-bag apparatus, comprising a supporting-bracket having a horizontally-arranged arm, a rebounding device having a vertically-adjustable connection with said bracket-arm, two stay-rods connected at one end with the rebounding device adjacent to the opposite sides thereof and at their other end having a vertically-adjustable connection with the supporting-bracket, and means for holding the rebounding device in a stationary adjusted position relative to the said bracket-arm.

4. A punching-bag apparatus, comprising a supporting-bracket having two arms, one of which is horizontal and the other vertical, a rebounding device having a vertically-sliding connection with the said horizontal bracket-arm, a sleeve or collar having a sliding connection with the said vertical bracket-arm, stay-rods connected at one end with the said sliding sleeve or collar and at their opposite end with the rebounding device, and means for holding the rebounding device in a stationary adjusted position relative to its supporting bracket-arm, for the purpose set forth.

5. A punching-bag apparatus, comprising a rebounding device, a head having a vertically-adjustable connection with said rebounding device and projecting at one end below the same, and a punching-bag connected with said head through the medium of a flexible connection, the said connection being attached to the head whereby the same length of connection between the bag and the head will be maintained during any adjustment of the latter.

6. A punching-bag apparatus, comprising a rebounding device having a tubular stem, a head adjustably supported within said tubular stem and projecting at one end below the rebounding device, the said head being vertically adjustable relative to the latter, and a bag connected with said head through the medium of a flexible connection.

7. A punching-bag apparatus, comprising a rebounding device, a bag suspended below said rebounding device through the medium of a flexible connection, and a yieldingly-supported device arranged in a position in the path of movement of the said flexible bag connection to be engaged thereby subsequent to the initial swing-off of the bag and prior to its contact with the rebounding device, for the purpose set forth.

8. A punching-bag apparatus, comprising a rebounding device, a punching-bag suspended below said rebounding device through the medium of a flexible connection, and a spring arranged in a position in the path of movement of the said flexible bag connection to be engaged thereby during the swing of the bag, for the purpose set forth.

9. A punching-bag apparatus, comprising a rebounding device, a punching-bag suspended below said rebounding device through the medium of a flexible connection, said flexible connection comprising a core-piece and an outer stiffening sheath or cover, and a device arranged in a position in the path of movement of the said flexible bag connection to be engaged thereby during the swing of the bag, for the purpose set forth.

10. A punching-bag apparatus, comprising a supporting-bracket having a horizontally-arranged arm, a rebounding device having a vertically-adjustable connection with said bracket-arm, a stay-rod connected at its op-

posite ends with the rebounding device and with a support respectively, the connection at one end of the rod being adjustable, and means for holding the rebounding device in stationary adjusted position relative to the said bracket-arm.

11. A punching-bag apparatus, comprising a rebounding device having a tubular stem, a punching-bag suspended below said rebounding device through the medium of a flexible connection the upper end of which extends into the said tubular stem, and means longitudinally adjustable relative to said stem having the said upper end of the flexible bag connection connected therewith.

Signed at New York, in the county of New York and State of New York, this 21st day of July, A. D. 1903.

WILLIAM J. BRYON, JR.

Witnesses:

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