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STRIKING BAG AND SWIVEL AND UNIVERSAL JOINT ATTACHMENT THEREFOR.

APPLICATION FILED APR. 7, 1904.

Fig. 1.

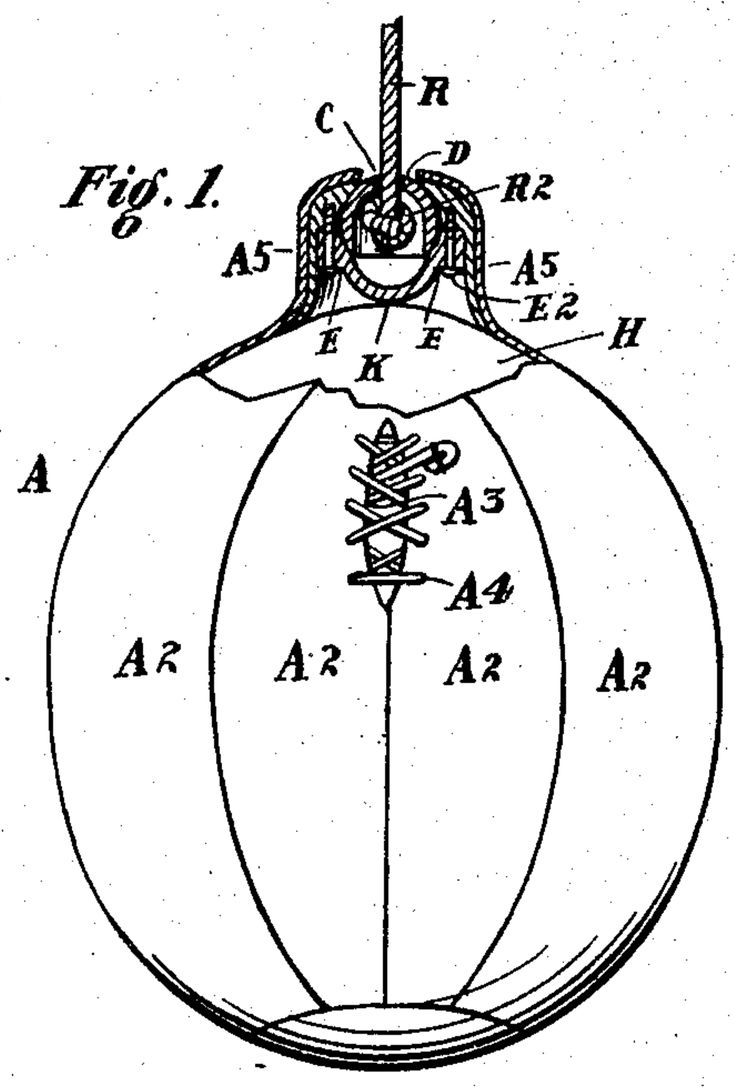


Fig. 2.

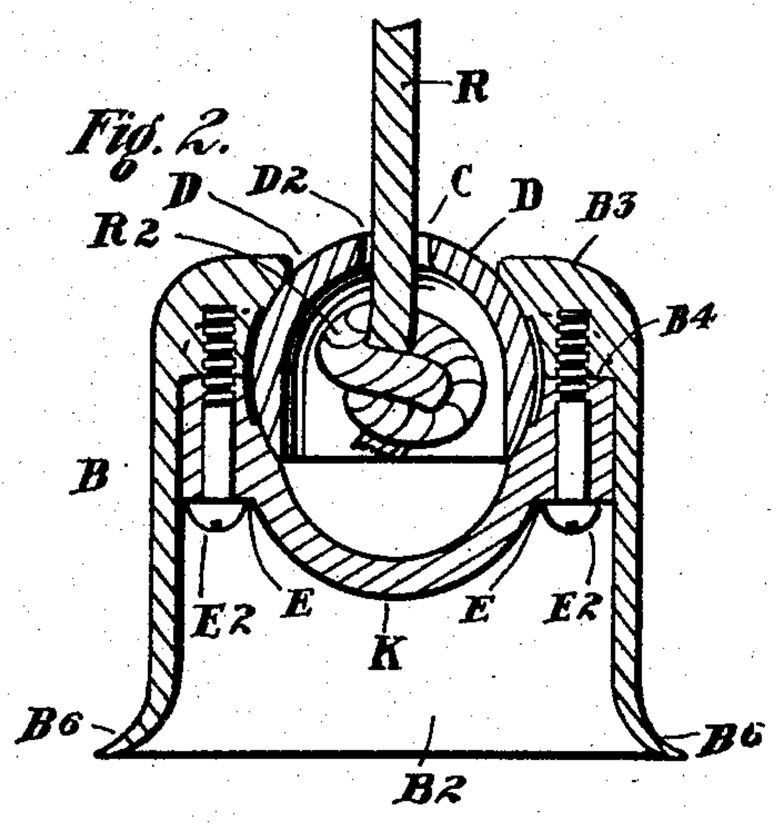


Fig. 3.

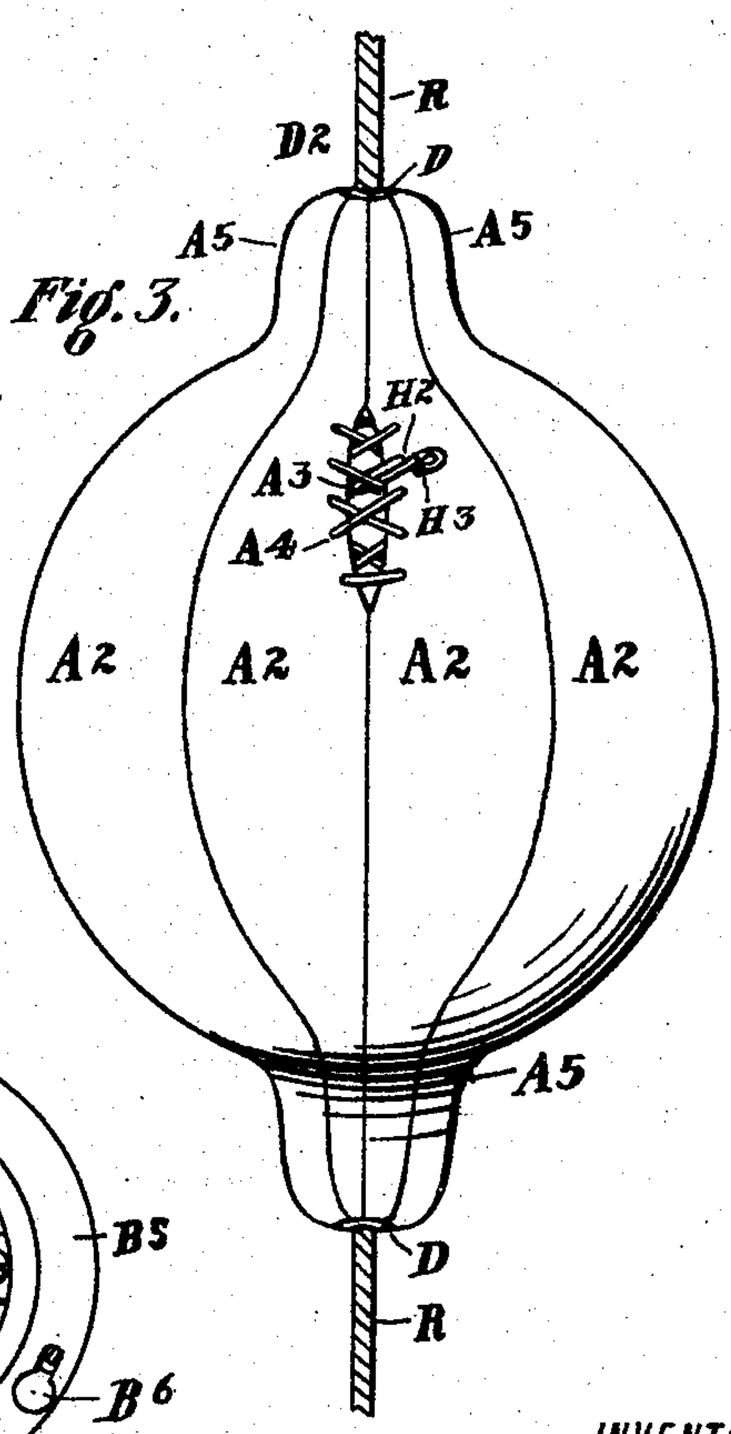


Fig. 4.

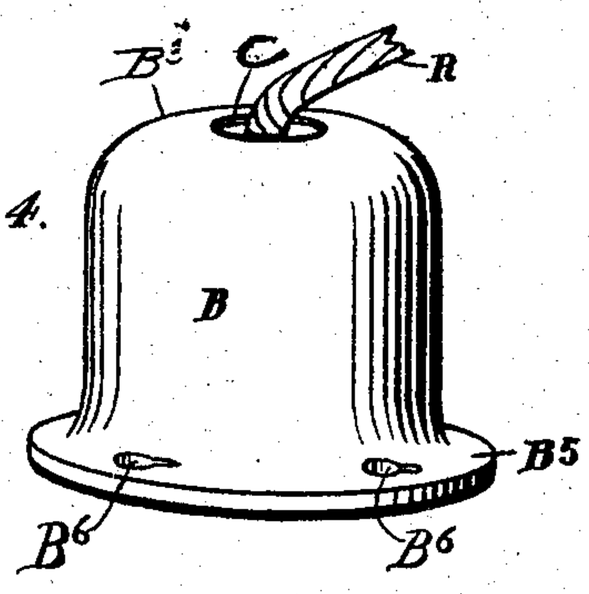
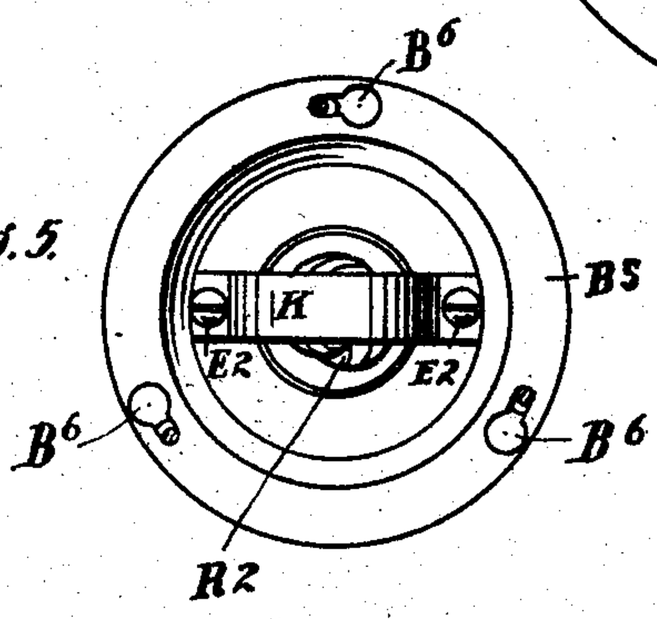


Fig. 5.



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UNITED STATES PATENT OFFICE.

HUGO GOLDSMITH AND EDGAR J. GOLDSMITH, OF CINCINNATI, OHIO, ASSIGNORS TO P. GOLDSMITH'S SONS, OF CINCINNATI, OHIO, A FIRM.

STRIKING-BAG AND SWIVEL AND UNIVERSAL-JOINT ATTACHMENTS THEREFOR.

SPECIFICATION forming part of Letters Patent No. 782,332, dated February 14, 1905.

Application filed April 7, 1904. Serial No. 201,996.

To all whom it may concern:

Be it known that we, HUGO GOLDSMITH and EDGAR J. GOLDSMITH, citizens of the United States of America, and residents of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Striking-Bags and Swivel and Universal-Joint Attachments Therefor, of which the following is a specification.

The several features of our invention and the various advantages resulting from their use conjointly or otherwise will be apparent from the following description and claims.

In the accompanying drawings, making part of this application, and in which similar letters of reference indicate corresponding parts, Figure 1 is an exterior view of a striking-bag provided with our improved rotatable attachment and showing the preferred mode of adapting the bag to hold the rotatable attachment. The upper end portion of the bag is broken away to reveal the construction of the bag and of the rotatable attachment. Fig. 2 is a vertical central section of the rotatable attachment, on an enlarged scale, the connecting rope or cord being shown in elevation. Fig. 3 represents an elevation of a punching or striking bag provided at each end with a rotatable attachment and adapted by our preferred mode to duly hold these attachments in position. The ropes respectively connected to the upper and lower ends of the bag are, in part, shown. This figure is on substantially the same scale as Fig. 1. Fig. 4 is a view in perspective illustrating the lower portion of the joint or attachment adapted to be attached in a manner differing from that in which we have illustrated it as secured in the Figs. 1, 2, and 3. Fig. 5 is a view of the joint when viewed from below, presupposing the device to be in the position shown in Fig. 1. This figure shows one of the means for attaching it by the bottom and independently of the bag. Figs. 1 and 3 are of one scale. Fig. 2 is on an enlarged scale. Figs. 4 and 5 are on a common scale; but this scale is somewhat less than that of Fig. 2.

We will now proceed to describe our invention in detail.

A indicates the bag. In the construction of it any suitable material may be employed. The bag is preferably composed of sections A^2. The latter are suitably united together, preferably by a row or rows of stitching at their inner side. This bag has the usual opening A^3 for the reception of the bladder or inflatable bag H, the latter being of rubber or any other suitable material and of the desired construction. When the common form of bladder is employed, it will have a neck H^2, whose end may be bent upon itself and tied fast with a cord H^3. In this manner the air within the bladder when inflated will not be allowed to leak out. At the end or top of the bag we locate our improved rotatable attachment. The latter is substantially as follows: We provide a stiff framework B, preferably of a bell shape. The end B^2 toward the interior of the bag is open. The end B^3 opposite to end B^2 has an opening C centrally located relatively to the frame B and adapted to receive the upper end portion of the frame D. Within the frame B and adjacent to the end B^3 we locate a frame D, for the most part spherical or approximately of that shape. This spherical frame has an opening D^2 large enough to freely receive the usual rope R or cord, whereby said bag is held to that end of it. The frame B is adapted to receive the rounded frame D and allow the latter to oscillate after the manner of a universal joint. This rounded frame D is preferably a sphero-segment in external conformation and when made as preferred and shown has a central opening and chamber to receive the rope which is connected to the striking-bag. This frame D is suitably held to place in the frame B, preferably by a device we have invented, to wit: a ring E, adapted to fit within the frame B and opposite the shoulder or annular flat part B^4 of the frame B. This ring E is properly concave at its inner side to embrace the adjacent portion of the spherical frame D. Thus when the ring E is in place it securely retains the frame D in position and at the same time permits this frame to freely oscillate and the

frame B to turn around it. The ring is removable to allow of the ready insertion of the frame D into place within the frame B. It is better to do this than to make the frame B in sections. We prefer to make the ring E adjustable to and from the part B^4 of the frame. This we do by means of two or more screws E^2 screwing into the frame, preferably at the part B^4. By duly operating the screws E^2 the ring is advanced toward the part B^4 or retracted therefrom. We are thus enabled to hold the frame D in close proximity to the frame B and yet leave it loose enough within its holdings to allow it and the frame B to turn freely relatively to one another; but other modes of advancing and retracting the ring may be present. One of such means would be to form a screw-thread on the periphery of the ring and adapt this thread to engage a screw-thread on the interior of the frame B. When this rotatable device is duly connected to the bag A and the cord R having been inserted through the opening B^3 and the opening C and knotted at R^2 within the frame D, the device is in working order; but the knot may be omitted, and other means of fastening the cord R with the frame D may be present. When the bag is struck to one side of the center and in response to the blow rotates laterally, it can freely do so, and this without twisting the cord R. The frame B will whirl or revolve with the bag and around the frame D. The frame D and the cord will not be turned. As before observed, the bag, if struck above or below the center, is free to oscillate relatively to the cord R, because the frame B can turn upon the frame D.

While the rotatable device can be connected to the bag outside of the latter, and in some instances it is desirable to do so, yet in many, if not most instances, it will be desirable to form a closer union to accomplish certain advantages we have in mind. To this end we extend the sections A^2 of the bag and form an extension-chamber A^5. Within this latter we locate the rotatable device. The sections of the material of which the bag is made curve up and fit closely around the outer part B of the rotatable attachment. Such is its shape and the form of the chamber A^5 that after being located in the chamber it will retain its place there without any fastenings, the friction and pressure of the leather of the bag at chamber A^5 being sufficient to hold it in place.

When the bladder or inner inflatable bag H is filled with air, that end of the bladder adjacent to the rotatable device will press against it and aid in securely holding it to place when the bag A is spread out and might exert less friction on the sides of the frame B. The adjacent end of the bladder H is liable to press against the under part of the spherical part D. Thus it would obviously clog the conjoint operation of the parts D and B. We prevent such interferences by means of a stiff guard K, extending from the under part of the ring E to the opposite part of this ring E. Whether this guard be in the form of a sheet, or of one or more ribs, or of a mesh of wires, &c., is not vital to the essence of the construction. This guard may be in one with the ring E or be separate therefrom, as shown. In the latter case this guard is preferably held by the screws E^2.

When the striking-bag is what is known as a "double-ended" one, each end being adapted to carry its cord, the latter to be fastened to a suitable holding part or anchorage, we prefer to use our improved swivel device at each end and also to employ the special construction of the end of the leather bag as shown in Fig. 1 and as hereinbefore described. The bag will then exhibit the form and make shown in Fig. 3. In such event one of the cords R, or both, will usually be elastic for obvious reasons.

When desired, this rotatable joint device may be put on the outside of the bag, and in one mode of connecting the same to the bag the material of which the bag is made may be forced up inside of the frame B; but when preferred the end B^2 may be closed and the connection be otherwise.

As hereinbefore suggested, we expect that the joint device may be used independently of the special form of bag we have shown. One form of the various means that may be employed for the attachment of the rotatable attachment or device to the article with which it is to be used is indicated in Fig. 4, in providing the edge of the flange B^5 with holes B^6, wherein screws may be used. One of the various uses of such construction may be for attaching the rotatable device to an overhead platform for supporting the rope of the striking-bag, &c.

What we claim as new and of our invention, and desire to secure by Letters Patent, is—

1. In a rotatable attachment, the combination of an outer frame, provided with a top opening, a convex receptacle within having an opening in its top, for the reception of the cord, a piece adapted to embrace an under or rear portion of the convex receptacle, and means for enabling it to be secured in position to the outer frame, substantially as and for the purposes specified.

2. In a rotatable attachment, the combination of an outer frame, provided with a top opening, and open at the bottom, a convex receptacle having an opening in its top for the reception of the cord, an annular piece adapted to embrace an under or rear portion of the convex receptacle, means for enabling it to be secured in position, and a guard located below and across the space in the outer frame and below the convex receptacle, substantially as and for the purposes specified.

3. The combination of a rotatable attachment for the rope, and a striking-bag which is

at the end extended upon the outer frame of the attachment, and covers and holds the latter in place, substantially as and for the purposes specified.

4. The combination of a rotatable attachment for the rope, and a striking-bag which is at the end extended over the frame of the attachment, the frame of the latter provided with a lower outer annular extension, adapted to fit the swell of the bag at the base of the said extension, substantially as and for the purposes specified.

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Attest:
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