(No Model.)

J. LOVATT.

APPARATUS FOR TEACHING THE ART OF BOXING.

No. 426,944. Patented Apr. 29, 1890.

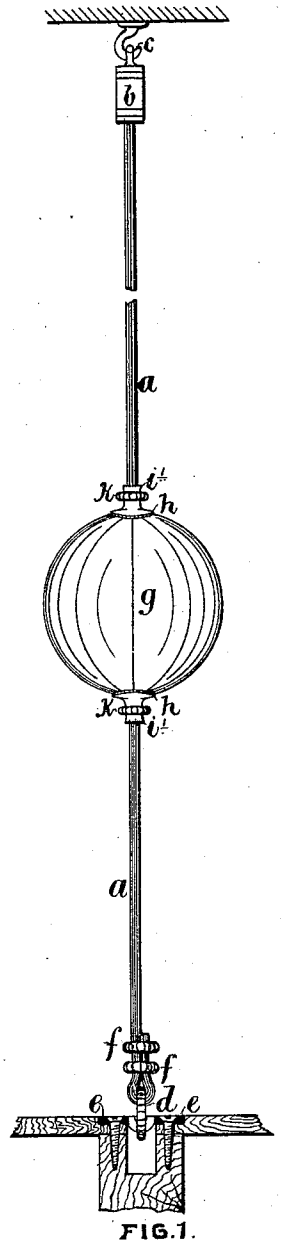


FIG. 1.

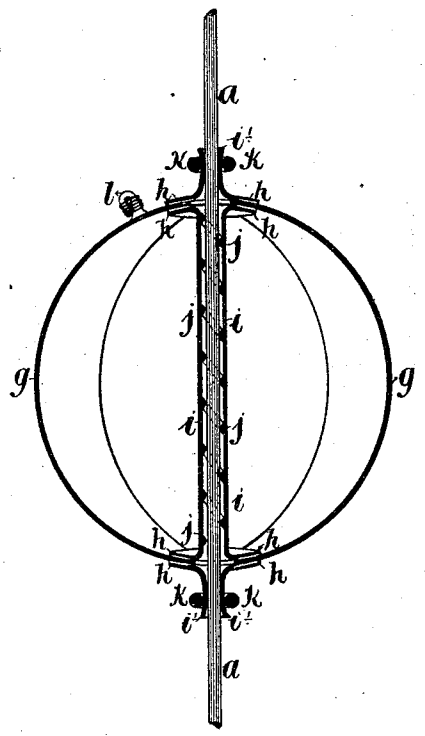


FIG. 2.

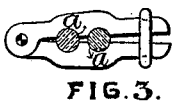


FIG. 3.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN LOVATT, OF MANCHESTER, COUNTY OF LANCASTER, ENGLAND.

APPARATUS FOR TEACHING THE ART OF BOXING.

SPECIFICATION forming part of Letters Patent No. 426,944, dated April 29, 1890.

Application filed April 27, 1889. Serial No. 308,897. (No model.) Patented in England September 22, 1888, No. 13,733.

To all whom it may concern:

Be it known that I, JOHN LOVATT, a subject of the Queen of Great Britain and Ireland, residing at Manchester, in the county of Lancaster, England, have invented a new and useful Improvement in Apparatus for Facilitating the Teaching of the Art of Boxing, (for which I have obtained a patent in Great Britain, No. 13,733, bearing date September 22, 1888,) of which the following is a specification.

This improved apparatus is designed to take the place of the inflated bladders, sand-bags, or similar apparatus hitherto used as a dummy in practicing the art of boxing; and it consists of an inflated india-rubber casing, by preference of spherical form, or as hereinafter described, and which is supported at the desired height and rendered adjustable between the ceiling and floor, say, of the room upon an elastic tube or band secured at its extremities, as hereinafter described. This casing being inflated through a suitable mouth-piece and supported as aforesaid, so forms an effective substitute for the bladders or sand-bags hitherto employed for the purpose.

In the accompanying drawings, Figure 1 is an exterior view of my improved apparatus, showing the same affixed between the ceiling and floor of the apartment in accordance with my invention. Fig. 2 represents a sectional view of my improved inflated casing, showing its internal construction. Fig. 3 is a detail view of a clamp for securing the core *a* in position.

In performing my invention I employ an india-rubber core or band *a*, the upper extremity of which is provided with a metallic eye *b* or door-expander fastening, and is thereby hung onto a hook *c*, screwed or otherwise secured to the ceiling of the apartment. The lower extremity of this core *a* is passed through a drop-ring *d*, secured to a floor-plate *e*, and which ring is capable of falling into a recess in the plate, and so to lie flush with the floor when not required for the purpose of this invention. Upon being drawn through this ring the end of the core *a* is doubled back, as illustrated, and conveniently secured by an india-rubber band *f*. Instead of this mode of securing, I sometimes employ a clip or clamp, as illustrated in Fig. 3, for securing the two thicknesses together, or a bent peg-clip or other adjustable fastener might be substituted.

Upon the length of the core *a*, I mount my improved inflated casing *g*, the construction of which is seen more clearly in Fig. 2. This casing *g* is made of vulcanized india-rubber sheeting or other suitable elastic material, and in the drawings is illustrated as of a spherical form; but I do not confine myself to this shape, as it will be evident that my improved inflated casing may be of an oval or other desired form, or may approach more or less in appearance to that of the human figure. This casing *g* is secured at both the top and bottom by a double pair of flanges *h h* (one inside and the other outside) to an india-rubber tube *i*, within which and interposed between it and the core *a* is a spiral core *j*, of india-rubber, which serves to stiffen and strengthen the apparatus to better resist the concussion when in use. The extremities or extensions of the tube *i*—which extensions may be formed by sleeves *i'* of substantially the same diameter as the tube and formed with or attached to the flanges *h*—extend slightly beyond the casing *g*, as illustrated, and when the casing *g* is adjusted at the desired height an india-rubber ring *k* is drawn over these extremities to secure the casing *g* in position.

To move and adjust the casing along the length of the core *a*, it is only necessary to slide back the rings *k*, and then by stretching the core *a* its diameter is reduced and the inflated casing can be easily raised or lowered, and thus adjusted to any height between the ceiling and the floor and to the greatest nicety, and this without disturbing either the top or bottom fastenings.

I cover the outside of my improved inflated casing with cloth, stockinette, or any other suitable fabric or material. I inflate my improved casing or apparatus through the mouth-piece *l* with air or gas.

My improved training apparatus is found to be not only useful for facilitating the

teaching and practicing of the art of boxing, but is equally available as an all-round trainer for all classes of athletes.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In an exercising apparatus, the india-rubber casing *g*, capable of being inflated, constructed at both top and bottom with a double pair of flanges *h h*, the inner flange being connected to an india-rubber tube *i*, within which is a spiral coil of india-rubber, and the outer flange being connected to sleeves *i'* and provided on the outside with india-rubber rings *k*, all substantially as shown, and for the purposes specified.

2. In apparatus for teaching the art of boxing, the combination of an inflated casing *g*, with an india-rubber tube *i* passing through said casing, and a spiral stiffening-core *j* within said tube, substantially as described.

3. In an exercising apparatus, the combination of an inflatable casing *g*, an elastic core *a*, adapted at one end to be secured to a fixed support, a ring *d*, through which the other end of said core is passed, and an adjustable clamp engaging both limbs of the core and adapted to secure the same together at any desired point, substantially as set forth.

4. The combination of the inflated casing *g*, with an india-rubber tube *i* extending through the same, and gripping-rings *k*, embracing the respective ends of said tubes, substantially as shown, for the purposes specified.

In testimony whereof I affix my signature to the foregoing specification.

JOHN LOVATT.

Witnesses:

JOHN G. WILSON,

WALTER GLENN.