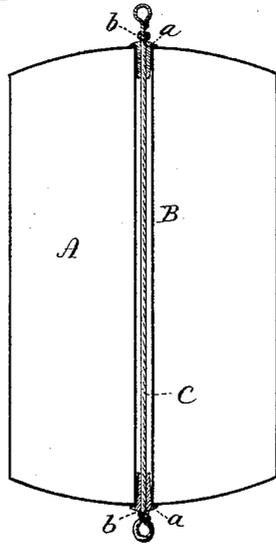
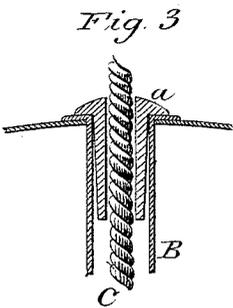
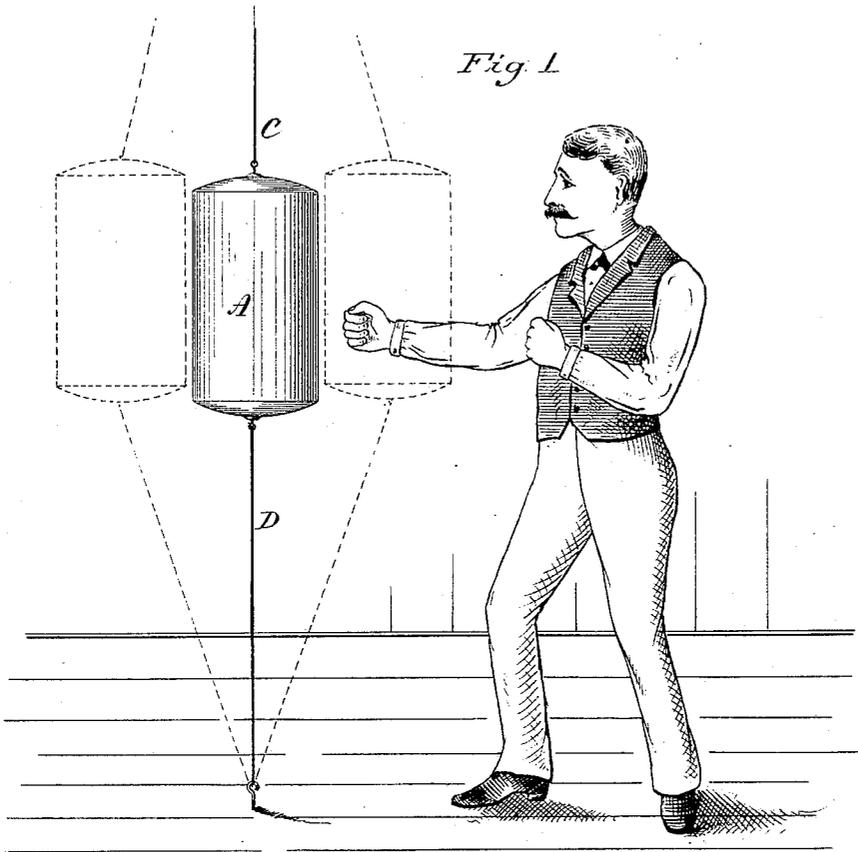


(No Model.)

C. E. LONGDEN.  
EXERCISING BAG.

No. 318,766.

Patented May 26, 1885.



Witnesses.  
*J. F. Shumway*  
*J. C. Earle*

Chas. E. Longden.  
 Inventor.  
 By Atty.  
*J. C. Earle*

# UNITED STATES PATENT OFFICE.

CHARLES E. LONGDEN, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE SEAMLESS RUBBER COMPANY, OF SAME PLACE.

## EXERCISING-BAG.

SPECIFICATION forming part of Letters Patent No. 318,766, dated May 26, 1885.

Application filed January 26, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. LONGDEN, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Exercising-Bags; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, the bag suspended as in use; Fig. 2, a vertical central section of the inflated bag enlarged; Fig. 3, a partial vertical section, one end of the bag enlarged to more clearly illustrate the invention.

This invention relates to an improvement in the class of exercising apparatus commonly known as "sand-bags,"—that is to say, bags which are suspended, and so that the person exercising may strike the bag with the fists, forcing it from its normal position, to again return to be met by the fists.

An important improvement in this class of exercising apparatus consists in the substitution of an inflated india-rubber bag for the sand-bag, the inflated bag being hung to the ceiling, and with an elastic connection from its lower end to the floor. This improved bag, owing to the elastic connection with the floor, makes a quicker return, and also presents a better surface to the fists of the person exercising.

The bag has usually been constructed with a loop in its upper and lower ends, one of which is suspended from the ceiling and the other connected to the floor. These loops have been attached directly to the ends of the bag, and made substantially an integral part of the bag. Such connections, in the use of the bag, bring a very great strain upon the ends, making it difficult to so secure the loops to the ends with sufficient strength to stand the strain; but however strong they may be attached they frequently break away and destroy the bag for further use.

The object of my invention is to make the connection between the ceiling and floor independent of the bag, and so that the bag will be held upon the supporting device without

strain upon it; and it consists in constructing the bag with a tube extending through it, open at both ends, and of somewhat greater diameter than the diameter of the suspending cord or device, and through which the said cord or device passes, the said cord or device held by a suitable device from direct contact with the bag, as more fully hereinafter described.

A represents the bag inflated. This is usually made from india-rubber, and is of cylindrical shape, the ends of the cylinder closed.

Through the cylinder from end to end, and should be in its longitudinal center, I arrange a tube, B, open at both ends, through the heads of the bag, the tube being united to the respective heads, so as to prevent the escape of air through or around the tube. The tube should be of flexible material, like the bag itself. The diameter of this tube is somewhat greater than the diameter of the cord by which it is suspended. At each end of the tube I introduce a sleeve, *a*, which substantially fits the respective ends of the tube, the opening through the sleeve corresponding substantially to the cord by which the bag is to be suspended. These sleeves are preferably made removable from the ends of the tube, but may be fixed therein.

C is a cord which is passed through the sleeves and through the tube, and preferably in the cord a knot, *b*, is made at each end of the bag, so that the knot will take a bearing on the sleeve. This cord is extended to the ceiling, or another cord attached thereto, as indicated in Fig. 1, and from the lower end the usual elastic connection, D, is made with the floor.

The sleeves *a* are best made with a head on their outer end, as seen in Fig. 3, so as to rest or bear against the heads of the bag.

The sleeves may be made from india-rubber, or from any suitable material, but should be such as to firmly hold the bag in its relation to the suspending device, and so as to prevent contact between the back and suspending device. Should the sleeves wear under use, they may be readily replaced without affecting the bag; but if made of rubber the wear or strain upon the sleeve is not great, so that, if preferred, the sleeves may be made a permanent part of

the bag; but I prefer to make them detachable, first, as being more convenient for the introduction of the suspending device through the tube, and, second, that they may be replaced should occasion require. By this construction the action of the suspending device during the exercise is brought entirely upon the sleeves. The connection is made between the ceiling and the floor independent of the bag—that is to say, is made directly through the bag without connection therewith, the knots, or whatever it may be, in the suspending device serving only to properly locate the bag on the suspending device; hence there is no strain upon the bag during the exercise, except that produced by the hands of the person exercising. The bag is therefore much more durable than the previous construction, to which I have referred.

The length of the sleeves, or what may properly be called "re-enforce," is immaterial, and they may extend as far into the tube as desired, even to its entire length.

I claim—

1. The herein-described improvement in ex-

ercising-bags, consisting of a bag adapted to be inflated, constructed with a tube longitudinally through it, open at both ends, and through which the suspending device may pass, substantially as described.

2. An exercising-bag adapted to be inflated, constructed with a tube longitudinally through it, of larger diameter than the suspending-cord, combined with a sleeve at each end of the tube, the opening through which corresponds substantially to the diameter of the suspending-cord, substantially as described.

3. An exercising-bag adapted to be inflated, constructed with a tube longitudinally through it, open at both ends, the said tube of larger diameter than the suspending-cord, a removable sleeve introduced into the ends of the tube, the opening through the sleeve corresponding substantially to the suspending-cord, the sleeves constructed with a head to rest against the end of the bag, substantially as described.

CHARLES E. LONGDEN.

Witnesses:

JOS. C. EARLE,  
J. H. SHUMWAY.