

No. 827,596.

PATENTED JULY 31, 1906.

W. G. WOOD.  
EXERCISING BAG.

APPLICATION FILED JAN. 30, 1903. RENEWED JULY 3, 1906.

FIG. 1

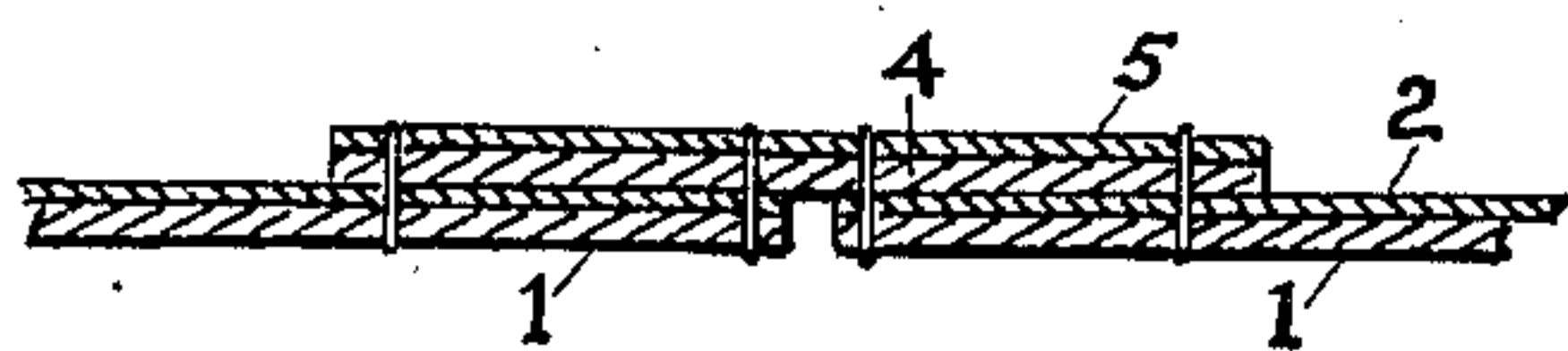
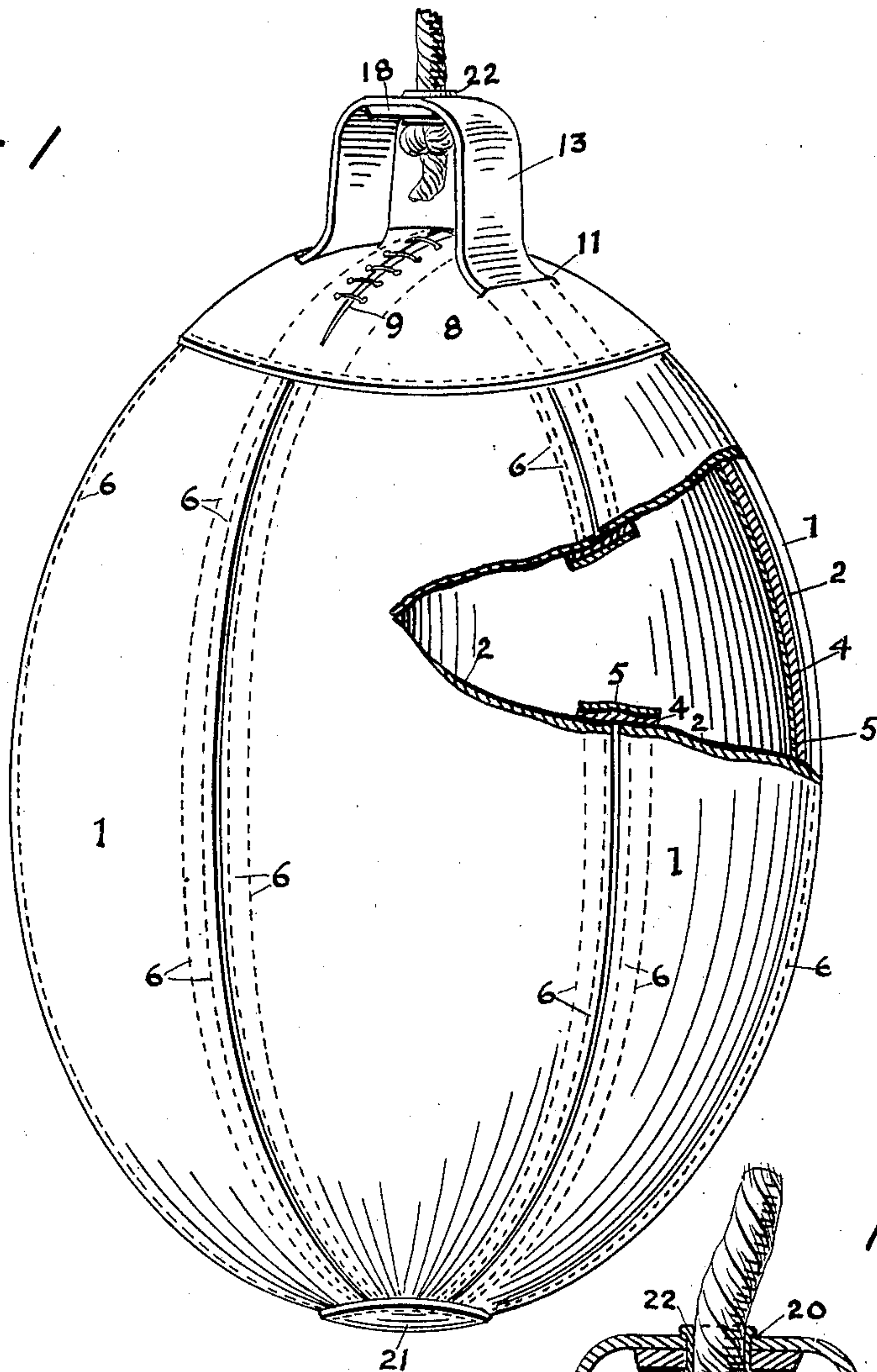


FIG. 2

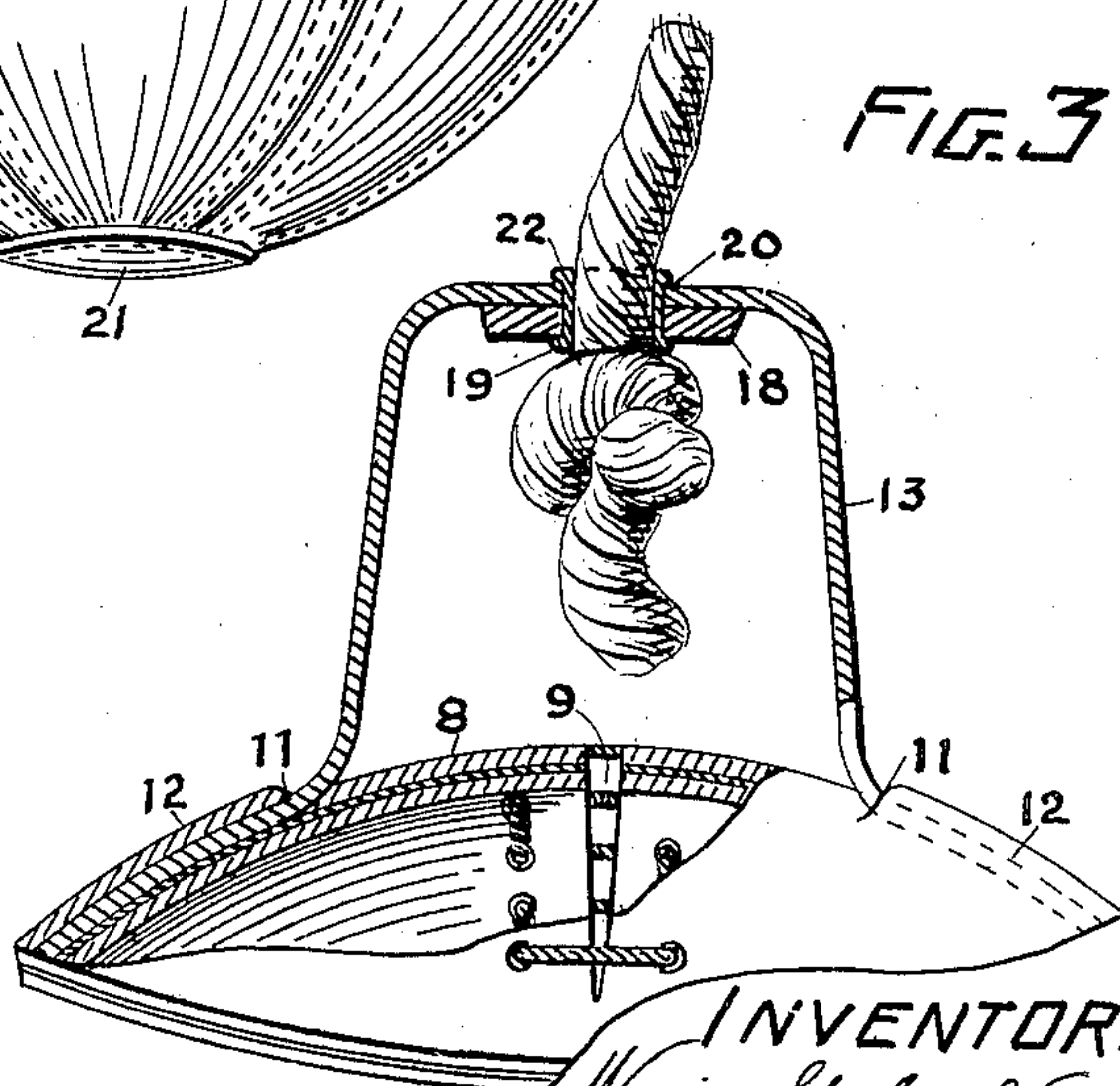


FIG. 3

WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM GRAHAM WOOD, OF SAN FRANCISCO, CALIFORNIA.

## EXERCISING-BAG.

No. 827,596.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed January 30, 1903. Renewed July 3, 1906. Serial No. 324,659.

*To all whom it may concern:*

Be it known that I, WILLIAM GRAHAM WOOD, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Exercising-Bags, of which the following is a specification.

My invention relates to exercising devices commonly known as "punching-bags" or "striking-bags" and comprising an external casing inclosing an air-tight expansible sack adapted to be inflated, so as to give the outside envelop a hard elastic character. These bags are suspended at a convenient height, so as to be struck. Invention and improvement as applied to this class of devices has been commonly directed to the suspension of the bag, and little attention has been paid to the external construction of the bag itself. It has been considered sufficient to construct the outside bag by sewing together sections of leather as strongly as possible. It is well known, however, that these bags as generally constructed have a comparatively short life and are frequently burst in use. This is because an outside bag composed of pieces of leather sewed together is inherently weak. The sewed joints are always under constant lateral strain produced by the internal air-pressure, which tends to separate them even when not in use. When struck violently and frequently, the sudden compression of the air and its immediate expansion increases the strain very greatly. Further, the exterior stitches under lateral strain are soon cut or worn through by contact of the bag with the ceiling.

The object of my invention is to make punching-bags which will be much more durable than those heretofore in use, and the principal means by which this object is accomplished is an improved construction and manner of assembling and securing the sections of leather which form the outside bag.

The invention also relates to particular means for suspending the bag.

All these various improvements are fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a punching-bag broken away in order to show my manner of securing together the sections which compose it. Fig. 2 is an enlarged sectional view of a joint between two sections of the

outer bag. Fig. 3 is an enlarged section of the suspension means.

The external bag is composed of sections 1, preferably of leather, and cut in such shape as when assembled to make a bag of proper form and dimensions. Each piece 1 has preferably a backing 2, of canvas, cut in the same shape and secured to it by adhesion in any suitable way. In the ordinary practice sections similar to those shown are secured directly to one another by stitching from edge to edge. This, as before explained, is a source of weakness, and no bag so constructed can possibly be durable. It will be noted that in my construction the meeting edges of the sections 1 are left entirely free and are not connected together directly. Instead a strip of leather 4, which is preferably provided with a canvas backing 5, covers the joint between the meeting edges of any two sections 1 and is then secured separately to both sections by rows of stitching 6. Consequently the strains before referred to have no direct lateral effect as upon stitching connecting the edges of the sections 1 together, but are taken up and absorbed by the backing-strip, to which such sections 1 are separately connected.

At the top of the bag the opening is closed by a cap 8, comprising two pieces of leather with interposed canvas sewed together and made, preferably, in circular form. This cap is sewed to the sections 1 and carries the suspension devices by which the striking-bag is held in position. It has a diametrical slit 9, the edges of which are provided with lacing-holes, so that such slit can be opened to admit the interior expansible sack and can then be closed by a proper lacing. Other slits 11 11 are made in the upper ply of the cap, so that pockets 12 may be formed between the plies of such cap, which pockets receive the ends of the suspension-strap 13. These ends are then firmly secured in such pockets by stitching.

I have provided a particularly strong and durable construction of the suspension strap or loop 13. To the middle of the strap is sewed a thick heavy leather block 18, provided with a perforation 19, which registers with a corresponding perforation 20 in the suspension-strap. The strap is in this way reinforced to such an extent as to make it practically impossible to tear or break it. The registering perforations 19 and 20 are



preferably provided with a metallic eyelet 22, which saves the leather from wear. The hole in the strap 13 should be of about the same diameter as the rope by which the bag is suspended and is used to put the rope through, so that with the rope knotted on the under side the bag is suspended without tying the rope to the loop, and the height of the bag can be easily and readily regulated by changing the position of the knot. In the old bags the bag was suspended by tying the rope to the loop, and this made a bulky knot and one which invariably slipped when in use, thus lowering the bag and making it necessary to continually keep shortening the rope and retying the knot. Another method was to enter the rope through a hole in the top of the bag and tie a knot on the inside before inflating. This method, while it maintained the height of the bag, made it necessary if men of different height were using it to unlace the bag, and perhaps expel the air to get at the knot every time it became necessary to alter the height of the bag. My improvement overcomes this objection, as the knot and all parts of the rope are exposed and easily manipulated and changed. The bottom of the outside bag is closed in the usual manner by the leather disk 21, externally sewed over the bottom opening.

My bag contains many improvements in general construction which will be apparent to those skilled in the art, but its main advantages lie in the manner of sewing the outside sections together so that there is no external stitching which is under strain. This being so, the beating or rubbing of the bag against the ceiling produces no wear upon the stitching, whereas when the sections are secured together by direct stitching under lateral strain such contact with the wall or ceiling soon cuts or wears the stitches. The

other main advantage is in the peculiar manner of suspending the bag by the rope, as fully hereinbefore described.

It will be evident that the construction of the outer bag as herein described can be applied to other exercising-bags in which an internal bag expands an outer casing—as, for instance, a foot-ball.

I do not limit myself to the identical constructions and arrangements herein described and shown in the drawings, as I desire to avail myself of such modifications and equivalents as fall properly within the spirit of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the outer sectional envelop of an exercising-bag, a two-ply cap covering the upper converging ends of said sections, slits formed in the upper ply of said cap so as to form pockets, and a suspension loop or strap secured in said pockets.

2. In combination with an exercising-bag, a suspension strap or loop connected to the bag, a reinforcing-block secured to said strap or loop, and registering perforations in said strap and said block to receive the hanger-rope.

3. In combination with an exercising-bag, a suspension strap or loop connected to the bag, a reinforcing-block secured to said strap or loop, registering perforations in said strap and said block, and an eyelet in said perforations.

In testimony whereof I have affixed my signature, in presence of two witnesses, this 15th day of January, 1903.

WILLIAM GRAHAM WOOD.

Witnesses:

LOUIS H. BROWNSTONE,  
L. W. SEELY.