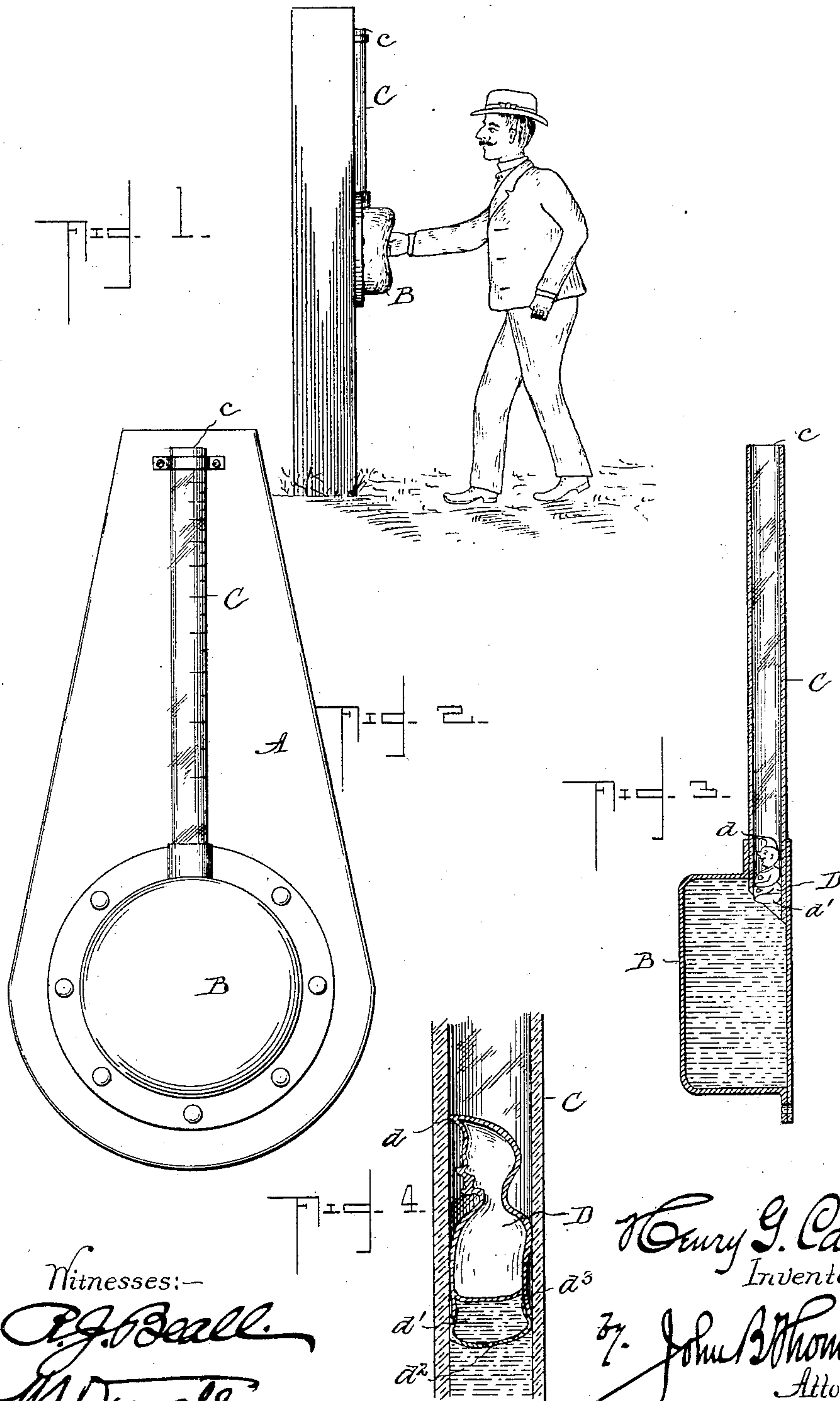


No. 750,593.

PATENTED JAN. 26, 1904.

H. G. CADY.
BLOW TESTING APPARATUS.
APPLICATION FILED JUNE 25, 1903.

NO MODEL.



Witnesses:—

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UNITED STATES PATENT OFFICE.

HENRY G. CADY, OF PINE BLUFF, ARKANSAS.

BLOW-TESTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 750,593, dated January 26, 1904.

Application filed June 25, 1903. Serial No. 163,081. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. CADY, a citizen of the United States, and a resident of Pine Bluff, in the county of Jefferson and State of Arkansas, have invented a Blow-Testing Apparatus, of which the following is a full, clear, and exact specification.

The object of this invention is to provide an apparatus for testing the punching or hitting power of the arm, that shall be simple and cheap in construction, effective in registering the power of the blow delivered, and shall include certain features that will produce an amusing effect incident to the operation.

With these objects in view the invention consists of a flexible punching-bag, secured to wall-plate and filled with water, a glass tube let into the upper end of said punching-bag and extending upward therefrom, and a figure movable in the tube by the rise and fall of the column of water therein.

The invention further consists in the detail construction of parts and combination of same, all as hereinafter fully described, and more specifically set forth in the appended claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a view showing the application of the invention. Fig. 2 is a front elevation of the apparatus. Fig. 3 is a longitudinal sectional view. Fig. 4 is a detail view, enlarged, of the float or figure.

Similar letters of reference indicate similar parts in all the views of the drawings.

In carrying out my invention I employ a wall-plate A, which serves as the support of the apparatus, and for this purpose is adapted to be secured to a vertical post, wall, or the like. To this wall-plate is firmly secured a punching-bag B, preferably composed of a rubber lining and a leather covering, the same being adapted to contain a body of water. In the upper end of this punching-bag B is a vertical glass tube C, depending a short distance into the punching-bag and extending above the same a suitable distance, with its upper end c open. Said tube is also secured

to the wall-plate, and is graduated to indicate the pounds pressure delivered upon the bag.

In the tube at the lower end thereof and floating on the water therein is a figure, as D, which may be and preferably is grotesque. When the punching-bag is expanded in its normal condition, the level of the water as well as the figure D is at the lower end of the tube, and when the bag is struck the water is forced out of the bag into the tube, and rising in the latter carries the figure with it. The figure is preferably provided with a cap, the point of which is projected forward to serve as the pointer of the apparatus.

In order that the figure may be held momentarily at the height to which it is carried by the water, the said figure is preferably provided with a small rubber bag, as d', which becomes filled with water when the figure is at its lower position, whereby it is expanded and will by frictional contact with the tube support the figure. When the figure is thus caught in the upper part of the tube and the water in the tube returns to the punching-bag, the water in the bag d' will flow out through the hole d², and the consequent contraction of the bag d' will permit the figure to fall. The vent d³ permits the water to flow into and out of the bag d'.

From the foregoing the operation of the apparatus will be readily understood, as any one striking the bag will compress the same, forcing the water from said bag into the vertical tube, and the height of the water in the tube (indicated by the figure D) will show the strength of the impact or blow upon the bag, the indicator being held by frictional contact until the water runs out of same.

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

1. In a blow-testing apparatus, the combination, of a wall-plate, a vertically-disposed flexible bag of soft material attached thereto and filled with water, and a tube open at its ends and let into the upper end of the bag from which latter it projects vertically.

2. In a blow-testing apparatus, the combi-

nation, of a wall-plate, a vertically-disposed flexible bag of soft material attached thereto and filled with water, a tube open at its ends and let into the upper end of the bag from
5 which it projects vertically, and a buoyant figure in the tube on the column of water therein.

3. In a blow-testing apparatus, the combination, of a flexible bag suitably supported
10 and filled with water, a tube let into the upper part of the bag and projecting above the same,

and an indicator or figure in the tube and provided at its lower end with a bag adapted to frictionally engage the tube.

In testimony whereof I have signed my name 15
to this specification in the presence of two subscribing witnesses.

HENRY G. CADY.

Witnesses:

A: T. LORING,
W. F. DUNLOP.