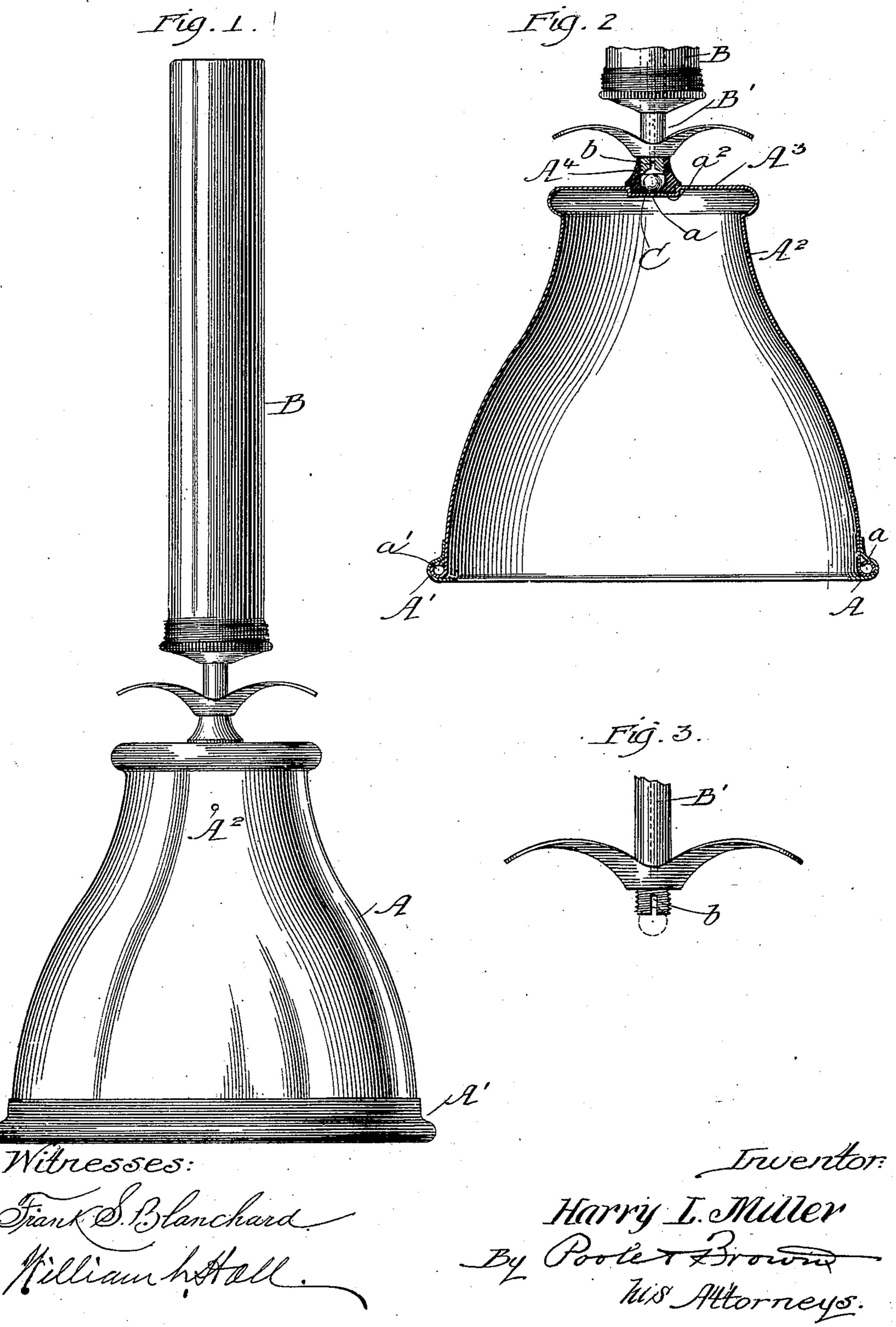
H. L. MILLER. BUST DEVELOPER.

(Application filed July 16, 1900.)

(No Model.)



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

United States Patent Office.

HARRY L. MILLER, OF CHICAGO, ILLINOIS.

BUST-DEVELOPER.

SPECIFICATION forming part of Letters Patent No. 667,447, dated February 5, 1901.

Application filed July 16, 1900. Serial No. 23,804. (No model.)

To all whom it may concern:

Be it known that I, HARRY L. MILLER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful 5 Improvements in Bust-Developers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, 10 which form a part of this specification.

This invention embraces certain improvements in bust-developers designed to enlarge the female bust; and the invention consists in the matters hereinafter set forth, and more 15 particularly pointed out in the appended

claims. In the drawings, Figure 1 is a side elevation of a device made in accordance with my invention. Fig. 2 is an axial section of that 20 part of the device in which the vacuum is produced. Fig. 3 is an end elevation of the

suction-pump nozzle.

As shown in said drawings, A designates a bell-shaped dome or casing which is open at 25 one end and closed at the other end but for a small exhaust-aperture a therein. Said casing constitutes a vacuum-chamber adapted to be applied at its open end to the part to be treated and connected at its other end with 30 a suction-pump B, of any convenient or desired form, by which air is exhausted from the casing. The open end of said casing is made larger than the other parts thereof, and said open end is desirably circular and of such 35 size in each case as to fully embrace the part to be treated. The margin surrounding the open end of the casing is provided with an outrolled bead a', which affords a bearingsurface for the casing and obviates cutting 40 edges, which otherwise might be pressed by the atmospheric pressure into and through the skin of the user. The said bead a' is other suitable elastic material, which acts as 45 a cushion and prevents the rigid material on the casing from chafing the parts being treated. One margin of said strip extends some distance above the bead a' in contact with the body of the casing, thereby affording an 50 extended bearing surface between the strip and casing. The strip may be secured to said casing by a suitable adhesive, if found nec-

essary. The cushioning-strip A' is made and fitted to the rim of the casing in such manner that the margin thereof closest to the 55 open end of the casing is left unattached or free and extends radially inwardly from the advance face of the bead a' in a plane generally perpendicular to the axis of the casing. The construction described affords a continu- 60 ous free flexible flap extending entirely around the margin of the casing and of such width as to permit it to conform closely to the contour of the parts being treated, notwithstanding that the casing may not conform 65 closely to said parts, and thereby the escape of air around the rim of the casing is avoided.

The wall of the casing is provided with a small relief-aperture A², located, as herein shown, near the smaller end of the casing; 70 but such location may be varied as conven-

ience may dictate.

The end wall A³ of the casing is provided centrally thereof with a nipple A4, which communicates with the exhaust-aperture α 75 thereof and which is interiorly screw-threaded to receive the nozzle B' of the exhaust-pump B, by means of which communication between said casing and pump is afforded. Between the nozzle of the suction-pump and 80 casing is located a check-valve, which, as herein shown, has the form of a ball-valve C, located within the hollow nipple A^4 between the nozzle B' and the aperture α . Said aperture a is formed centrally in a depression a^2 85 in the end wall of the casing, and the nipple A⁴ is seated within said depression and secured thereto by soldering or like means. The check-valve C is therefore seated against the outer surface of the cup-shaped depres- 90 sion when air is exhausted from the casing and is confined in place by the inner walls of the nipple.

In order to prevent the ball C from closing covered by an endless strip A' of rubber or | the passage in the nozzle B' of the pump, said 95 nozzle is provided in its end with a transverse slit b, which intersects the central passage thereof and affords lateral openings to said passage when the ball is in contact with the end thereof.

> The pump here shown is a familiar tubular cylindric form, but, as before stated, may be otherwise made as found most convenient. The casing of the vacuum-chamber is desir-

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ably made from a single piece of material and may be made of gutta-percha, glass, or sheet metal.

In using the device above described the open 5 end of the casing is placed against the body, around the parts to be treated, and pressed tightly thereagainst, so as to prevent the passage of air between the body of the user and the casing. At this time the pump will be in ro the position shown in Fig. 1—that is to say, in its retracted position. When the casing has been placed in the manner set forth and before the pump is extended to exhaust the air from the casing, the relief-aperture A² will 15 first be closed, preferably by the finger or thumb of the user. Upon extending or pulling out the pump the air is exhausted from the casing and the parts inclosed by the rim of the casing are subjected for the desired time 20 to the influence of the vacuum with the result that the supply of blood to the parts being treated is increased. The repetition of this treatment tends to an increased growth or an enlargement of the bust. After the parts have 25 been subjected to the influence of the vacuum for the desired time the relief-aperture A² is uncovered, thereby permitting the entrance of air to the interior of the casing, so that said casing may be easily removed.

1. A bust-developer comprising a bell-shaped receptacle made from a single piece of metal having one end open and the other end closed, except for a small orifice, therein, the casing being provided with a minute relief-aperture, and the margin of the open end

of the casing being rolled back upon itself to form a rim which is circular in cross-section, an elastic cushioning-band covering said rim, the inner edge of which is free and extends 40 past the wall of the casing in a direction generally perpendicular to the axis of the casing, and a nipple which is secured to the closed end wall of the casing and having an orifice which registers with the orifice in said wall, 45 said nipple being constructed for attachment thereto of the nozzle of an exhaust-pump.

2. A bust-developer comprising a bellshaped receptacle made of a single piece of metal having one end open and the other end 50 closed, except for a small inlet-orifice therein, the casing being provided with a minute relief-orifice, and the closed end wall of the casing being provided around said orifice with a depression, a nipple seated therein and hav- 55 ing an interior valve-chamber and an orifice, which latter registers with said inlet-orifice of the casing, a pump-nozzle detachably connected with said nipple, and a ball-valve in the chamber between the nozzle and the ori- 60 fice within the nipple, said pump-nozzle being provided at its end with a transverse slit intersecting the passage thereof and extending to the periphery of the nozzle.

In testimony that I claim the foregoing as 65 my invention I affix my signature, in presence of two witnesses, this 11th day of July, A. D. 1900.

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HARRY L. MILLER.

Witnesses:
TAYLOR E. BROWN,
JENNIE CARLSON.