

D. P. BUTLER.
Exercising Machine.
No. 223,799. Patented Jan. 27, 1880.

Fig: 1.

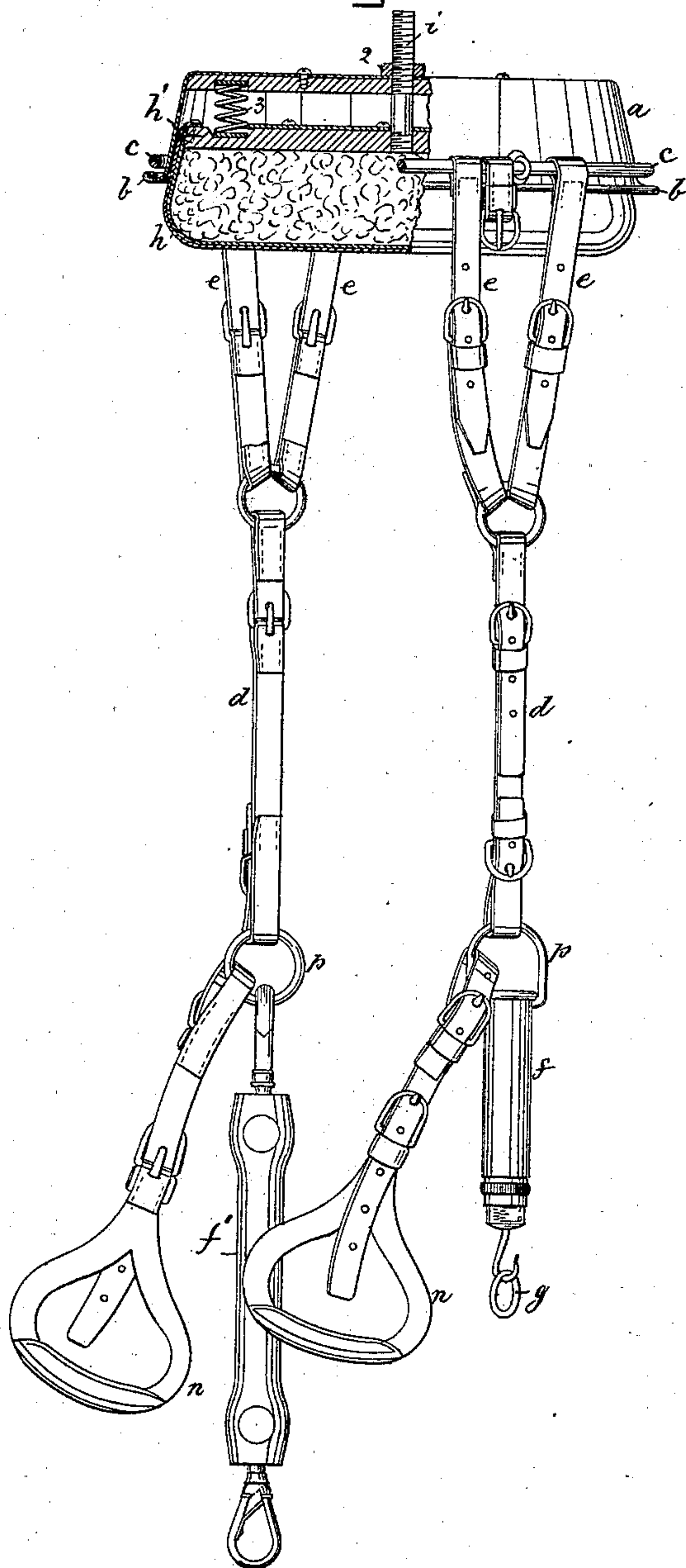


Fig: 2.

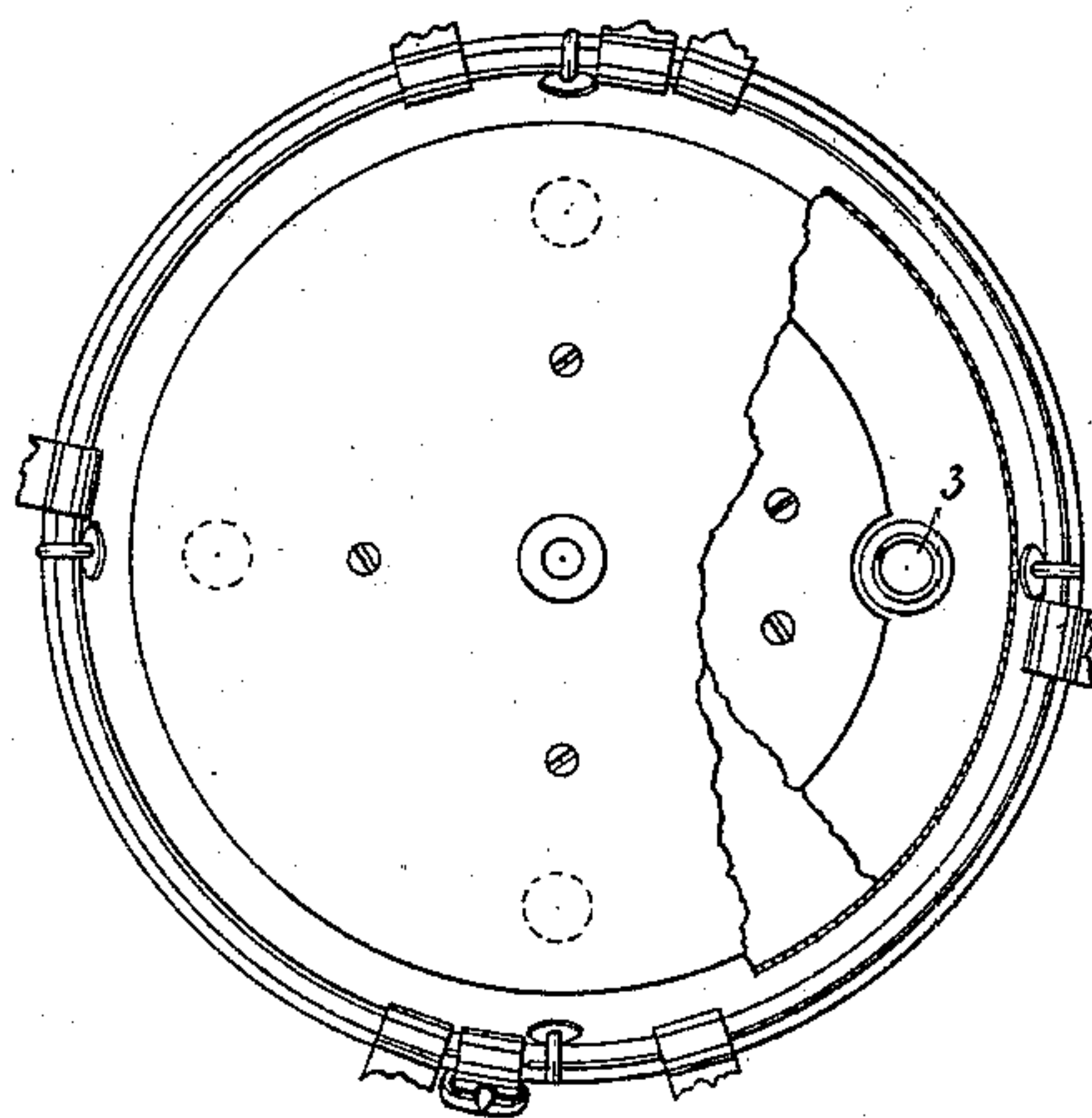


Fig: 3.

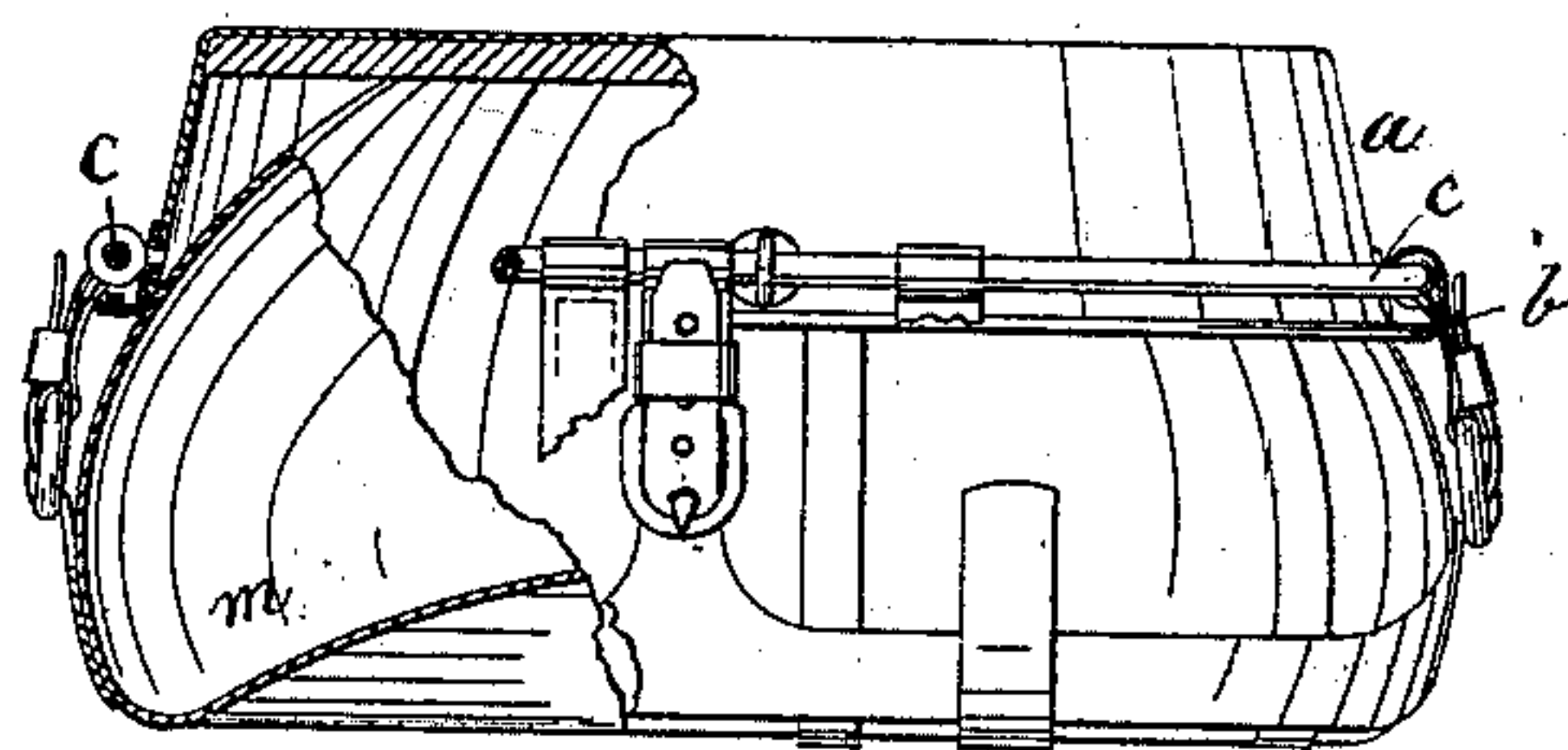
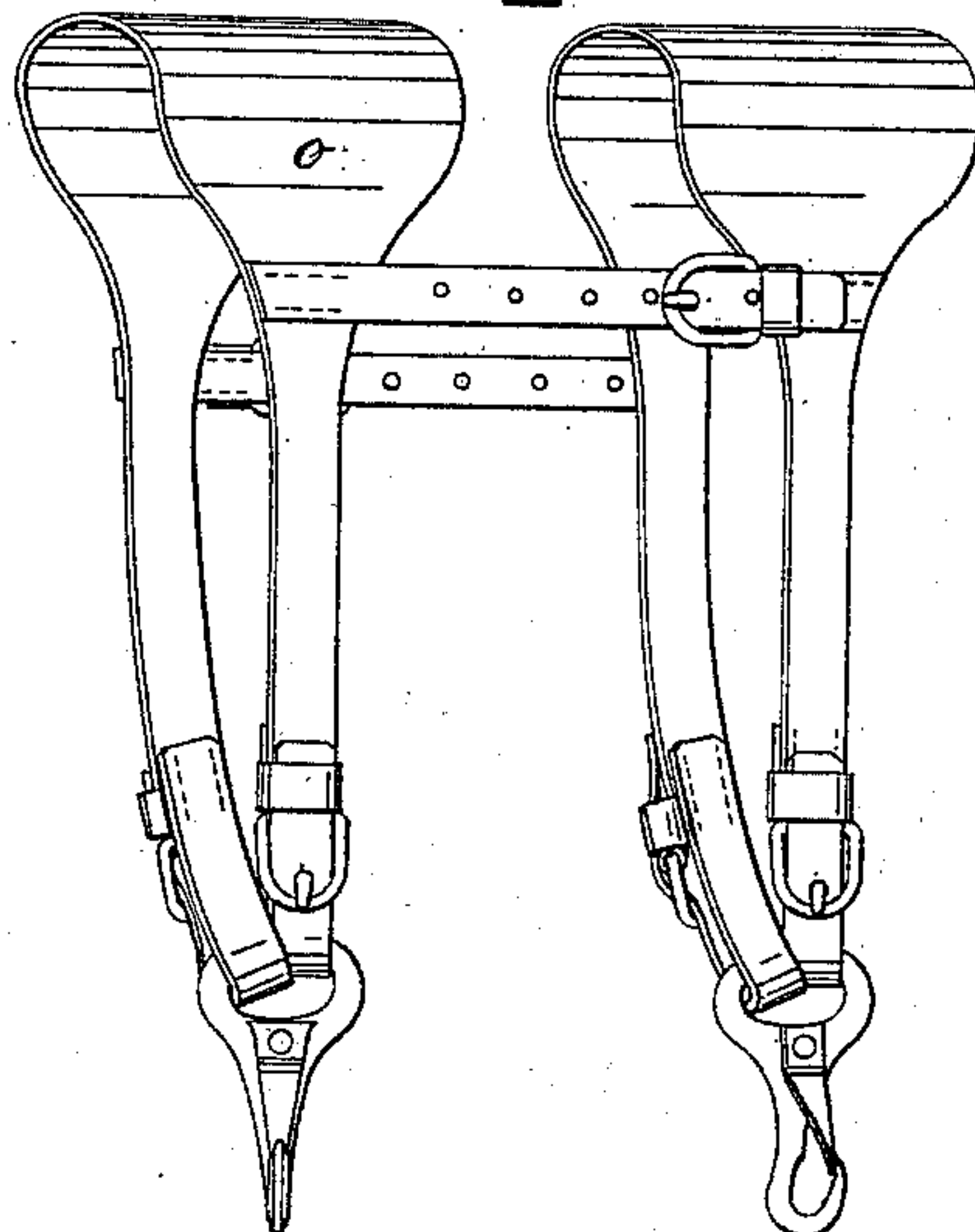


Fig: 4.



Witnesses.
Lawrence D. Connor.
Jos. P. Livermore

Inventor.
David, P. Butler,
by Crosby & Ingony, Attys.

UNITED STATES PATENT OFFICE.

DAVID P. BUTLER, OF BOSTON, MASSACHUSETTS.

EXERCISING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 223,799, dated January 27, 1880.

Application filed September 5, 1879.

To all whom it may concern:

Be it known that I, DAVID P. BUTLER, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Lifting Apparatus, of which the following description, in connection with the accompanying drawings, is a specification.

This invention relates to a health-lift or exercising apparatus for hygienic purposes.

10 In another application for United States patent, filed concurrently with this, I have shown an organized health-lift or exercising-machine in which the weight to be lifted is raised by the action of the head.

15 In this invention I aim to furnish a very cheap, simple, and portable health-lift to be applied to the head; and to do so I have provided a cushioned head-piece connected with suitable straps adapted to be attached to any
20 usual form of spring-balance or scale or weight.

Figure 1 represents one of my head-pieces in partial section, with attached straps and spring-balance and an india-rubber spring; Fig. 2, a top view, one side of the top of the
25 head-piece being broken away; Fig. 3, a modified form of head-piece; and Fig. 4, a shoulder-strap attachment, which may be added if desired.

The top, *a*, of the head-piece herein shown
30 resembles an inverted pan, its lower edges or portion being provided with a suitable lip, *b*, or projection to receive the ring *c* or other support for the side straps, *d*, which, at their upper ends, are preferably forked, as at *e* in Fig. 1, that the arms of the person may be passed
35 between them, so as to equally distribute the weight or resistance to be overcome at the back and front part of the head. The lower ends of these straps are connected with a resistance device, which may be represented by
40 any usual form of spring-balance, as at *f*, or, if desired, may be an india-rubber spring, as at *f'*, or might be a weight. The resistance device, if a balance or a spring, will be connected with a suitable fixed staple or ring, *g*.
45

The cushion *h* of the head-piece is shown as

composed of cloth or flexible fabric attached to plate *h'*, hair or other elastic medium or material being placed inside the fabric, as in Fig. 1.

The plate *h'* has a guiding-pin, *i*, extended therefrom through a hole in the top piece, *a*, and a nut, 2, is applied to the guiding-pin.

Spiral or other springs 3 (any suitable number) are applied between *a* and *h'*, (see Fig. 1,) to permit the cushioned part of the head-piece to move or sink more or less into the top part, *a*.

Instead of the cushioned part shown in Fig. 1, I may employ an inflated india-rubber bag, *m*, as in Fig. 3.

If it is desired to also lift with the hands, the person lifting may take hold of the loops *n*; or, if desired, the straps *d* and resistance devices *f* or *f'* may be of sufficient length to permit the feet of the person to be placed in the loops, the person being either in perpendicular or horizontal position.

The shoulder-straps *o* (see Fig. 4) may be connected with the resistance devices *f* or *f'* at rings *p*, or with any suitable weights which are to be lifted.

The india-rubber tube may be of more or less length, and may, if desired, take the place of the strap *d*.

I claim—

1. In a health-lift or exercising apparatus, a head-cushion, substantially as described, combined with the top piece to receive it and with resistance devices connected with and supported by the top piece, substantially as and for the purpose set forth.

2. The head-cushion, top piece, and resistance devices, combined with the loops *n*, substantially as described.

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

DAVID P. BUTLER.

Witnesses:

G. W. GREGORY,
N. E. WHITNEY.