

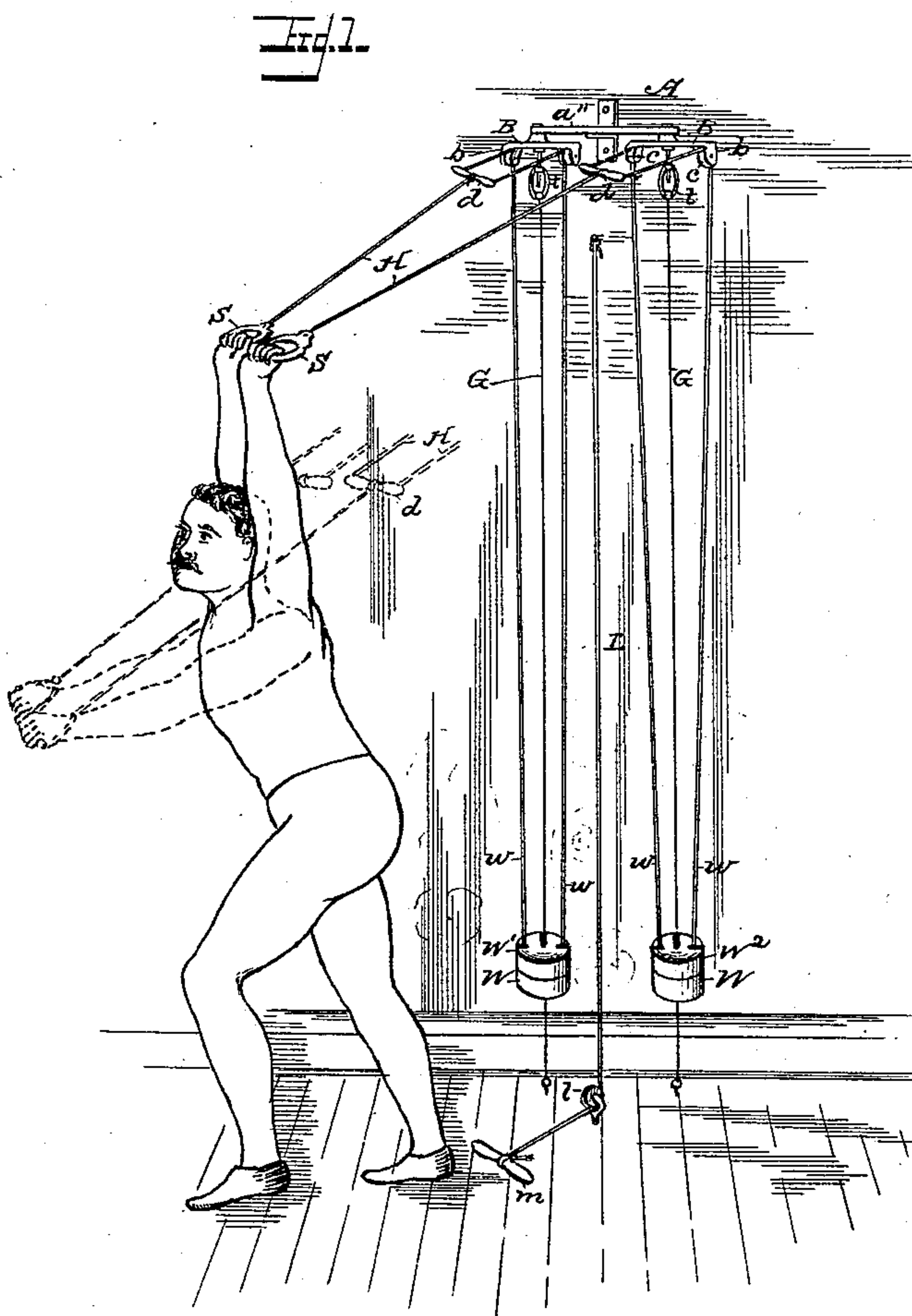
(No Model.)

3 Sheets—Sheet 1.

R. WRIGHT.
GYMNASTIC APPARATUS.

No. 478,833.

Patented July 12, 1892.



Witnesses
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(No Model.)

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Fig. 2

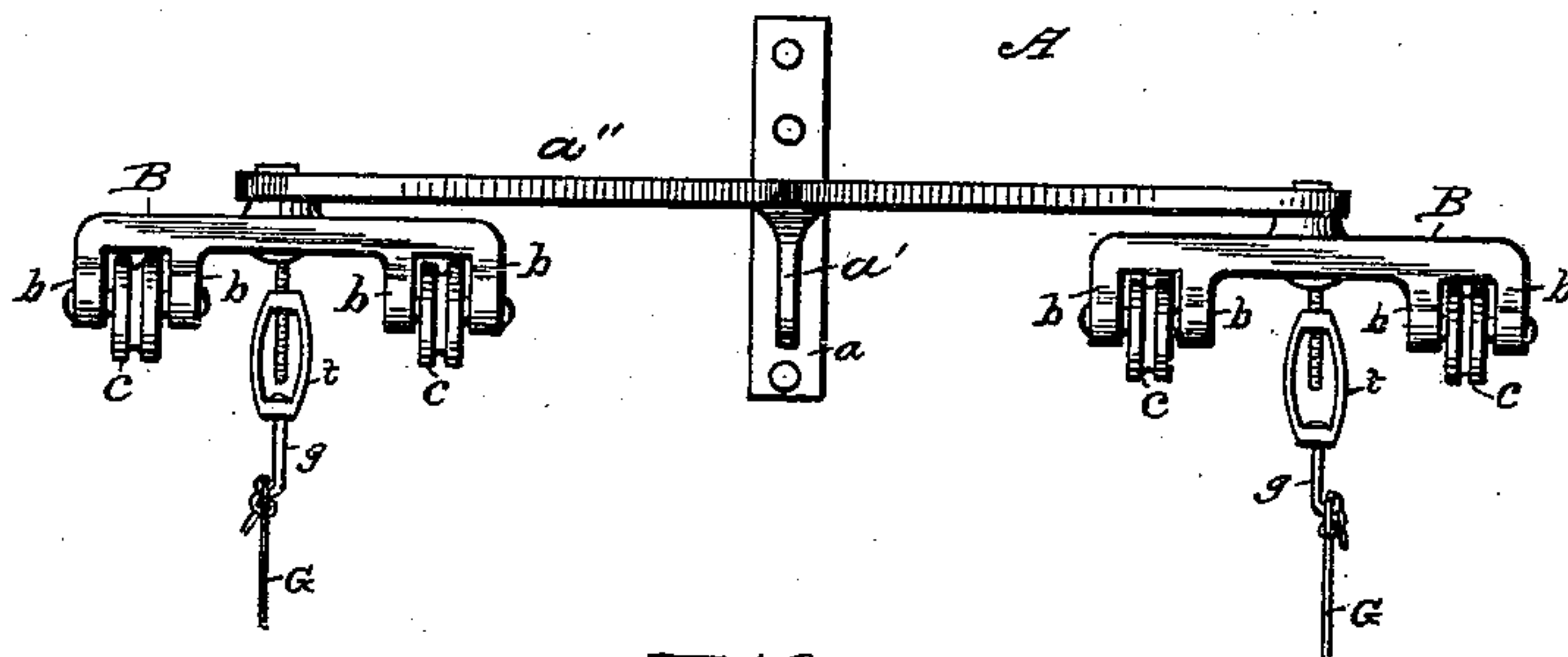


Fig. 3.

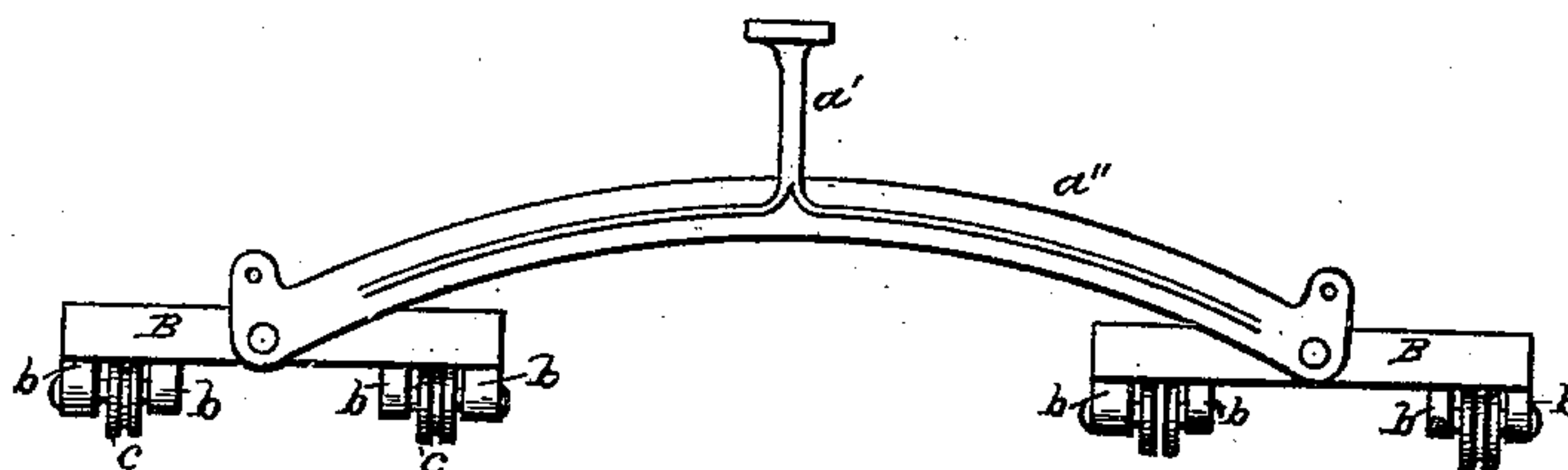
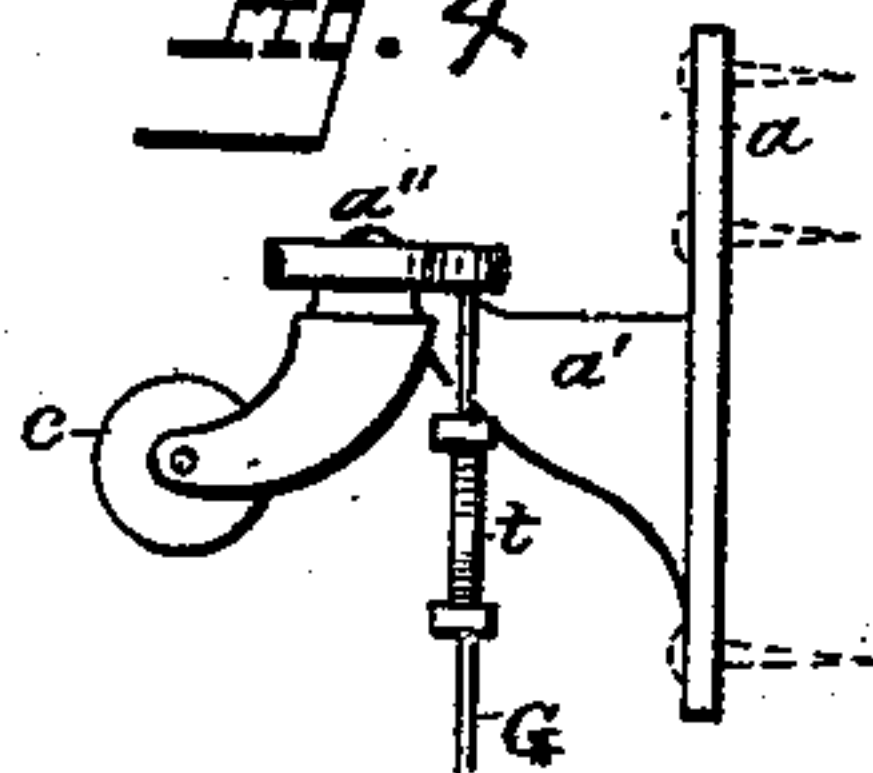


Fig. 4



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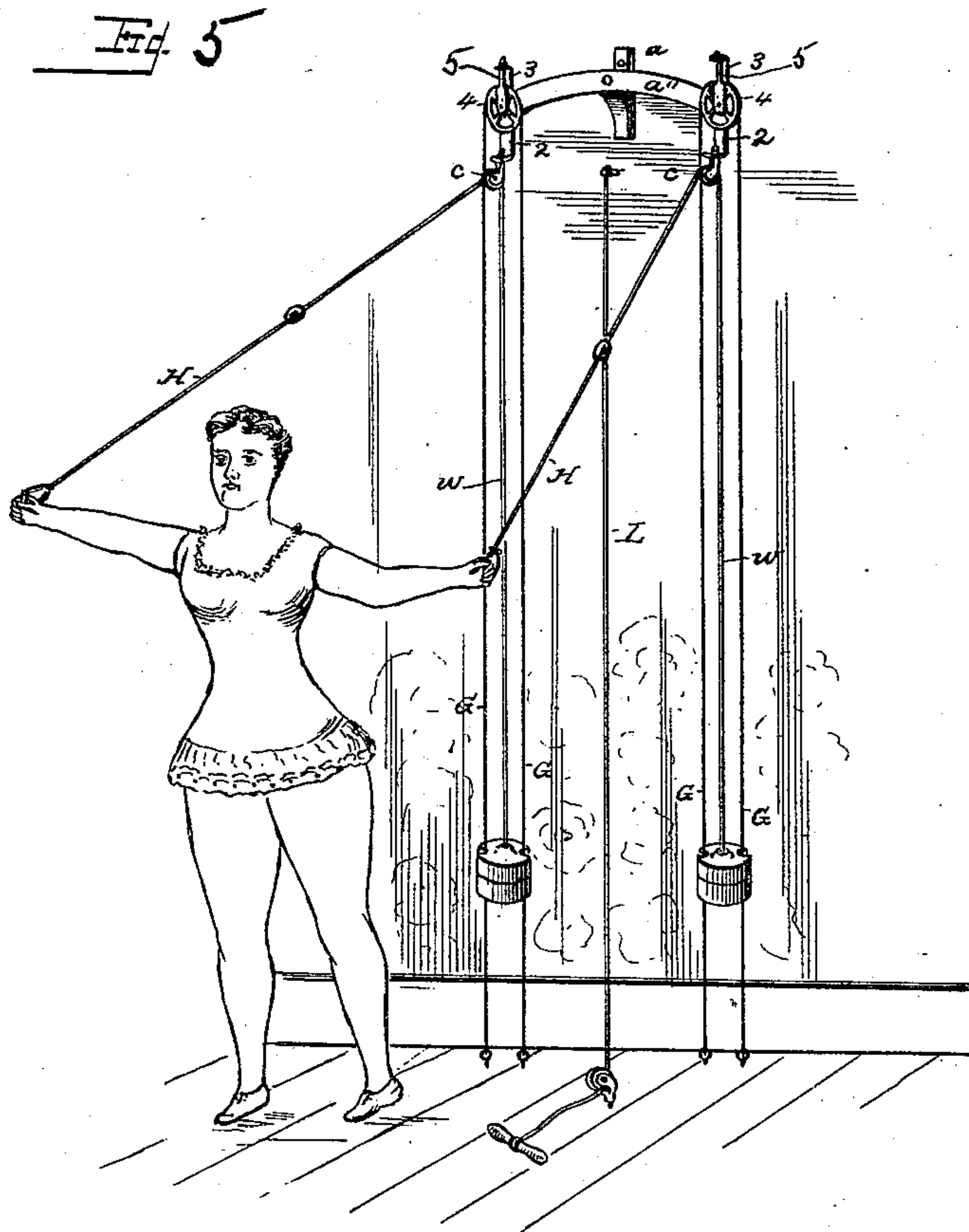
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UNITED STATES PATENT OFFICE.

ROBERT WRIGHT, OF DETROIT, MICHIGAN.

GYMNASTIC APPARATUS.

SPECIFICATION forming part of Letters Patent No. 478,833, dated July 12, 1892.

Application filed September 17, 1891. Serial No. 406,004. (No model.)

To all whom it may concern:

Be it known that I, ROBERT WRIGHT, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Gymnastic Apparatus for Physical Culture, of which the following is a full and complete description sufficient to enable others to understand and use the same.

The object of my invention is to provide a compact and convenient apparatus for indoor use adapted by a great variety of movements to exercise, train, and develop the different muscles of the body and limbs, one which is noiseless in operation, adapted to be conveniently put up, taken down, and moved, and which will occupy the least possible space.

To these ends the invention consists in the combination of cords, pulleys, and weights constructed and arranged as hereinafter described, and specifically pointed out in the claim.

By using weights a steady and uniform resistance is secured, which may be increased or diminished at pleasure by adding or taking off weights, and whereby the apparatus may be adapted to the requirements of different persons of greater or less strength or muscular development.

In the accompanying drawings, which illustrate my invention and form a part of this specification, Figure 1 is a perspective view of the apparatus, illustrating the manner of using the same. Fig. 2 is a front view of the bracket, cross-arm, and pulleys. Fig. 3 is a plan view. Fig. 4 is a side view of the bracket, and Fig. 5 is a perspective view of a modified construction designed for the use of ladies.

Referring first to the construction shown in Figs. 1, 2, and 3, A designates a bracket comprising a base adapted to be attached to the wall or support, a horizontal forwardly-projecting arm a' , and a horizontal cross-bar a'' on the outer end of the arm a' . To the under side of the bar a'' , at the ends thereof, are pivoted two short bars B B, provided at each end with depending lugs $b\ b$, between which are journaled pulleys $c\ c$, which carry the weight-cords.

W W designate the weights, to each of which at opposite sides are connected two

cords $w\ w$, which pass up over the pulleys $c\ c$, the cords of each weight being connected in front of the pulleys to the ends of a short bar d .

H H designate the hand-cords, which are connected at one end to the middle of the respective bars $d\ d$ and are provided at their other ends with suitable handles or stirrups S S to be grasped by the hands of the operator, who stands in front of the apparatus with his back to the same and exercises himself by alternately pulling and giving back on the cords H H to raise and lower the weights after the usual manner of apparatus of this character.

The weights W are guided in their upward and downward movements by guide-wires G G, secured at their lower ends to the floor and at their upper ends to hooks $g\ g$, which are vertically adjustable by means of turnbuckles $t\ t$, connected with lugs at the rear of the cross-bar a'' for the purpose of tightening the wires. The wires pass loosely through central openings in the weights and are for the purpose of preventing the latter from swing or vibrating.

The main weights W are of such weight as to adapt the apparatus to the use of children and persons of slight strength or muscular development. To adapt the apparatus to the requirements of older or stronger persons, auxiliary weights $W'\ W^2$ are provided (as many as may be required.) These are formed with notches in their sides, diametrically opposite for the reception of the cords $w\ w$ and with a radial opening to the center in a line at right angles to a line between the side notches for the reception of the wires G. The auxiliary weights are added and taken off, as required, to adapt the apparatus to the strength of the user.

To adapt the apparatus for the exercise and development of the muscles of the back and legs, an extra cord L is provided, which is attached to one of the bars d in place of the hand-cord H, which is taken off. This cord L passes down around a pulley l , secured to the floor in front of the weight W, and is provided at its free end with a handle m , adapted to be grasped by the hands in exercising the muscles of the back.

Referring now to the construction illustrated in Fig. 4, which is especially designed for the use of ladies, but may be used by others, the bar *a''* is pivoted at its center to the
5 end of the bracket-arm *a'* and is provided at its ends with depending arms 2 2, to which are swiveled the cord-pulleys *c c*. The bar *a''* also has at its ends upwardly-projecting arms 3 3, which carry vertically-adjustable
10 pulleys 4 4, the adjustment of which is effected by means of nuts on the screw-stems 5 5 of the pulley-frame. These pulleys receive the guide-wires *G*, which in this case are double, both ends being attached to the
15 floor, and are tightened by adjusting the pulleys 4. Single weight-cords are used in this construction; but the operation is the same as that first described with reference to Fig. 1.

Having now described my invention, I
20 claim—

In an apparatus of the character described, the combination, with the bracket comprising a base adapted to be attached to a wall or support, a forwardly-projecting arm, and a horizontal transverse arm, of two pulley-sup- 25 ports swiveled in the ends of said transverse arm, each carrying two pulleys, two independent weights and vertical guides therefor, two cords attached to each weight and passing over the pulleys and connected in front 30 of the latter to cross-bars, and hand ropes or cords attached to said cross-bars, substantially as shown and described.

In testimony whereof I affix my signature in the presence of two witnesses.

ROBERT WRIGHT.

Witnesses:

FRED R. GARTNER,
JOHN F. CALLAHAN.