

No. 786,552.

PATENTED APR. 4, 1905.

M. DUFFNER.  
EXERCISING DEVICE.  
APPLICATION FILED AUG. 18, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

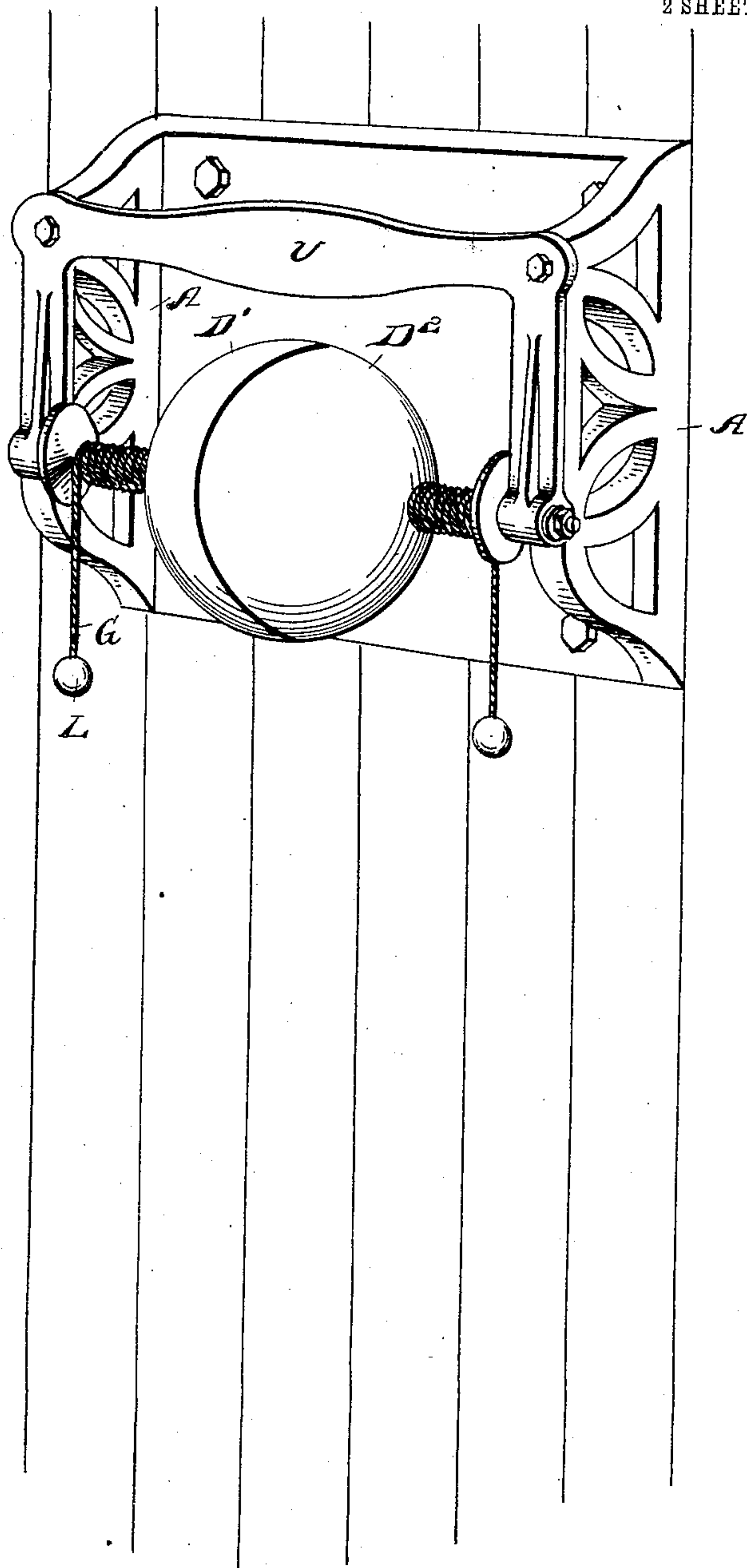


Fig. 2.

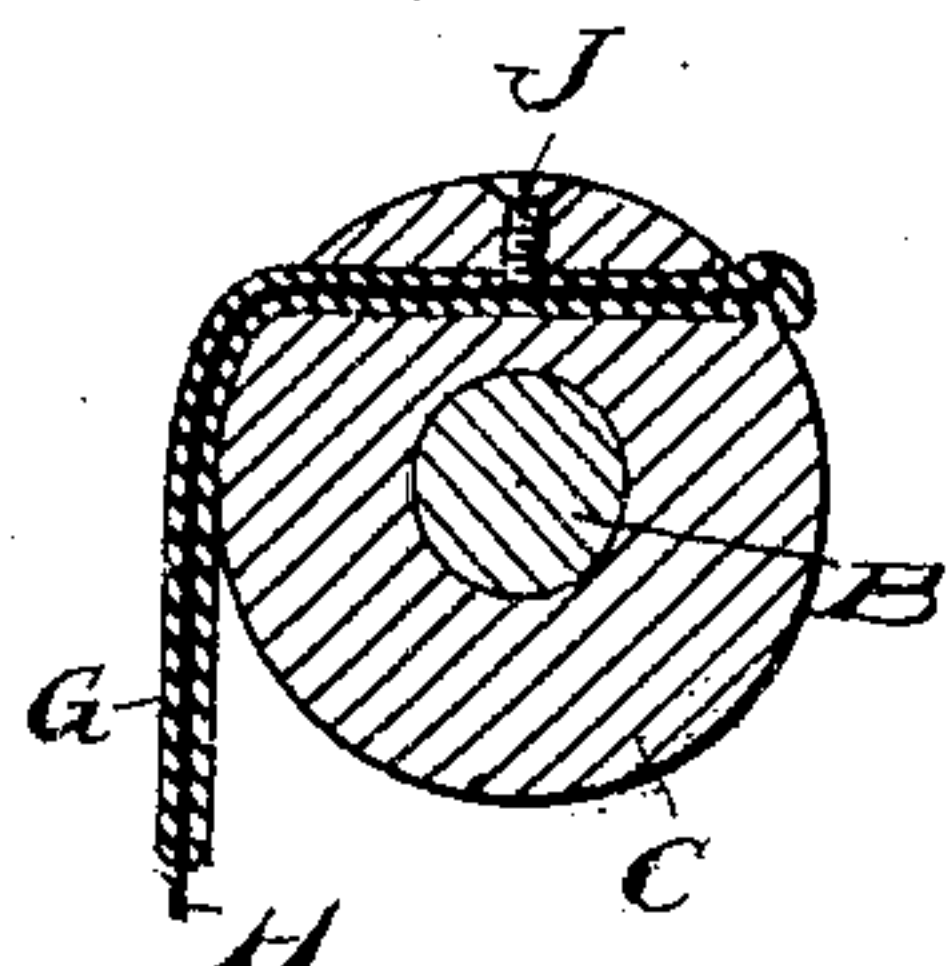
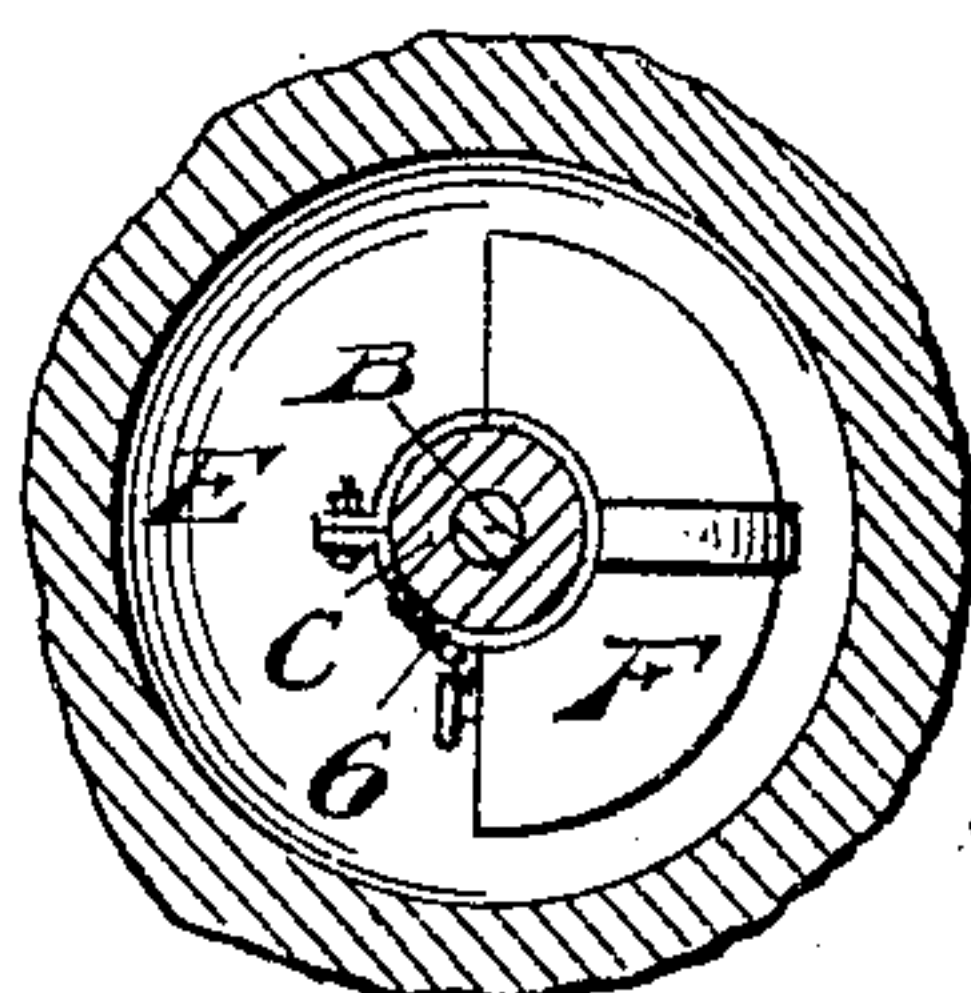


Fig. 3.



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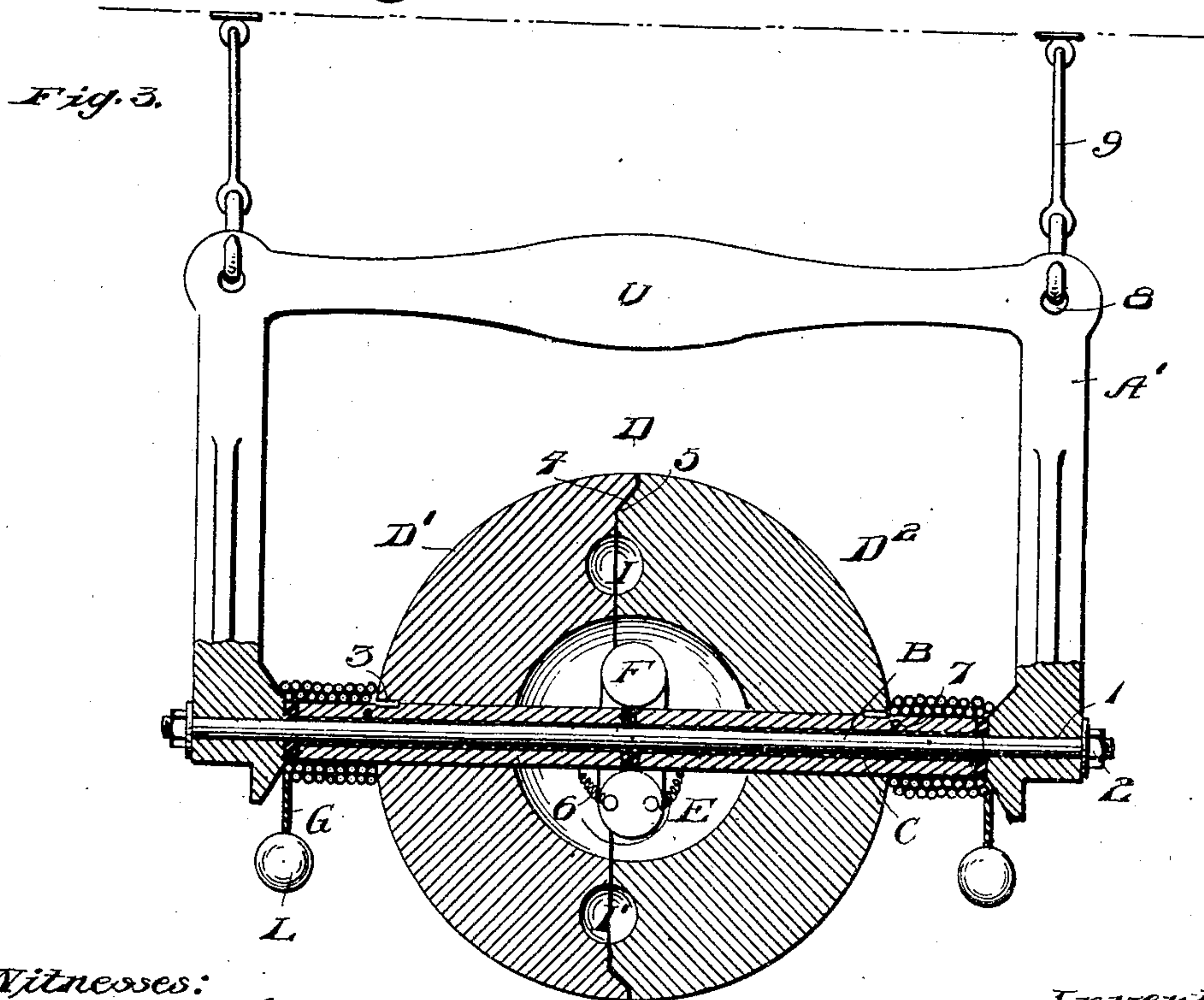
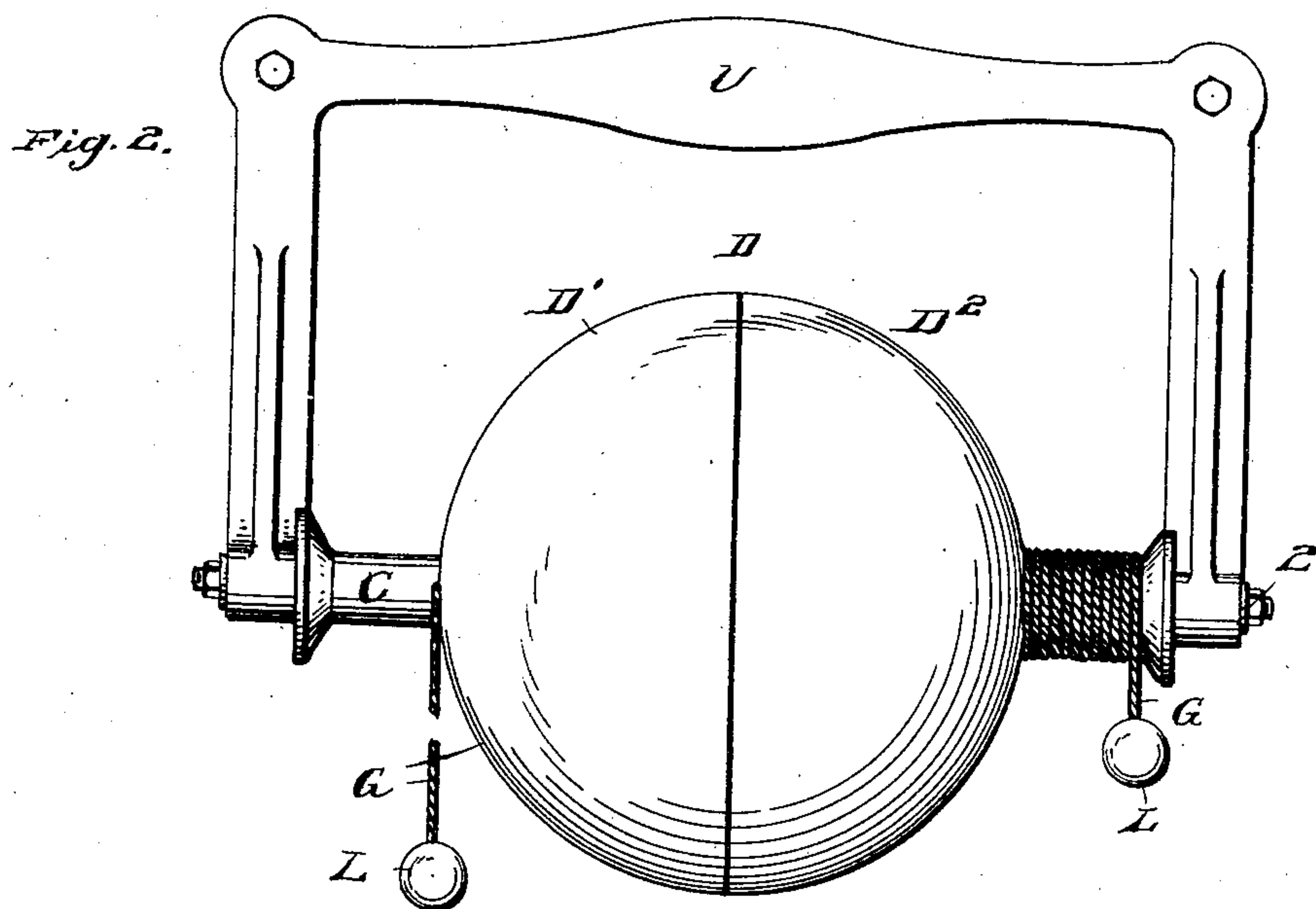
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2 SHEETS—SHEET 2.



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# UNITED STATES PATENT OFFICE.

MATTHEW DUFFNER, OF ALLEGHENY, PENNSYLVANIA.

## EXERCISING DEVICE.

SPECIFICATION forming part of Letters Patent No. 786,552, dated April 4, 1905.

Application filed August 18, 1904. Serial No. 221,209.

*To all whom it may concern:*

Be it known that I, MATTHEW DUFFNER, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Exercising Devices, of which the following is a specification.

This invention relates to exercising machines or apparatus; and it has for its object a device of this kind that not only serves as an exerciser, but at the same time provides an electric current for the user that greatly enhances the benefit of the apparatus.

Another object of the invention is to provide means whereby the source of electricity is carried by the exerciser itself. It also provides means whereby easy access may be had to the said electrical source for the purpose of recharging or removing.

Furthermore, it is the object of the invention to provide a device of this character that is portable—one that can be used attached to the wall, ceiling, or floor, or any other suitable place.

Furthermore, the object of the invention is to provide a device of the kind that is simple in construction, efficient in practice, and economical to manufacture.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts, to be hereinafter more fully described and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like reference characters will denote corresponding parts in the several views, and in which—

Figure 1 is a perspective view of the invention applied to a wall. Fig. 2 is a view in elevation of the device, a different form of bracket being employed. Fig. 3 is a view in elevation showing the device applied to the ceiling, part of the invention being shown in section. Fig. 4 is a cross-section of the shaft, showing section of the cord and the screw-contact; and Fig. 5 is a fragmentary cross-section showing battery.

In the drawings, A indicates a bracket in which is mounted a shaft B. The ends of said shaft pass through apertures 1 in the bracket and have threaded thereon the nuts 2 for holding the said shaft against removal.

On the shaft B is a sleeve C, of suitable conducting material, and said sleeve is adapted to fit snugly between the arms or sides of the bracket yet be free to rotate about the shaft B. Approximately centrally of the sleeve is keyed by the pins 3 a ball D. The said ball is formed of two semicylindrical sections D' and D<sup>2</sup>, each section having a centrally-hollowed-out portion adapted to register with each other and form a chamber E. The outer edge of the section D' is provided with an angular seat 4, in which the angular bead 5 on the section D<sup>2</sup> is adapted to fit, and thereby lock the sections in their assembled position.

Within the compartment E and secured to the sleeve C, and therefore rotatable therewith, is a battery F, which is electrically connected to the sleeve C by the wires 6. Exterior of and adjacent to both sides of the balls are apertures 7 in the sleeve C, in which the ends of cords G are adapted to be inserted, said cords having wires H centrally thereof, connected at one end to the balls L. Passing through the sleeve C are connecting-screws J, said screws being adapted to pass through the coating of the cords and make contact with the wire or metallic core. By this means a direct connection is made between the battery within the chamber E and the balls L, which in practice are grasped by the operator.

When in use the ball D is found to be too light, means are provided whereby additional weight may be added thereto. In the engaging edges of the members D' and D<sup>2</sup> are registering raceways I and I', which when in applied position form a course for the reception of shot or other weights. By this means the ball may be easily adjusted in weight to suit the operator.

In Fig. 1 the bracket for supporting the device is shown as consisting of four sides with the rear plate of the bracket secured to the wall and the exerciser held by the front face; but to permit of the device being attached either to the floor or ceiling a bracket ap-



proximately U-shaped is employed, Figs. 2 and 3. This bracket A' is provided at its corners with apertures 8, in which an end of a flexible or other connection 9 is adapted to be secured. The opposite end of this connection is secured either to the floor or ceiling. In Fig. 3 the device is shown as being attached to the ceiling.

In Fig. 2 the cords are illustrated as being oppositely wound upon the sleeve; but, as shown in Fig. 3, the cords may be wound parallel.

The operation of the device is thought to be clearly apparent, and the advantage of the vibratory sensation exerted by the electrical source and connection and the benefit of the electricity absorbed during the use of the device will be readily understood by those skilled in the art.

It is to be noted that various changes may be made in the proportions and details of construction for successfully carrying the invention into practice without departing from its scope.

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

1. In a device of the character described, a bracket, a shaft supported thereby, a sleeve on the shaft, a ball on the sleeve, a source of electricity within the ball and in connection

with the sleeve, and pulls on the sleeve and in electrical contact therewith.

2. In a device of the character described, a bracket, a shaft supported thereby, a sleeve on the shaft, a ball on the sleeve, said ball being in sections, a source of electricity within the ball and in connection with the sleeve, and pulls on the sleeve and in electrical contact therewith.

3. In a device of the character described, a bracket, a shaft therein, a sleeve on the shaft, a ball on the sleeve; said ball being in sections and means for securing the sections together, a source of electricity within the ball and in connection with the sleeve, and pulls on the sleeve and in electrical contact therewith.

4. In a device of the character described, a bracket, a shaft therein, a sleeve on the shaft, a ball on the sleeve, means for adjusting the weight of the ball, a source of electricity within the ball and in contact with the sleeve, and pulls on the sleeve and in electrical contact therewith.

In testimony whereof I affix my signature in the presence of two witnesses this 1st day of August, 1904.

MATTHEW DUFFNER.

Witnesses:

S. H. PARKER,  
JOHN M. SERIGHT.