

No. 629,655.

Patented July 25, 1899.

W. J. BRYON, JR.
EXERCISING APPARATUS.

(Application filed Jan. 21, 1898.)

2 Sheets—Sheet 1.

(No Model.)

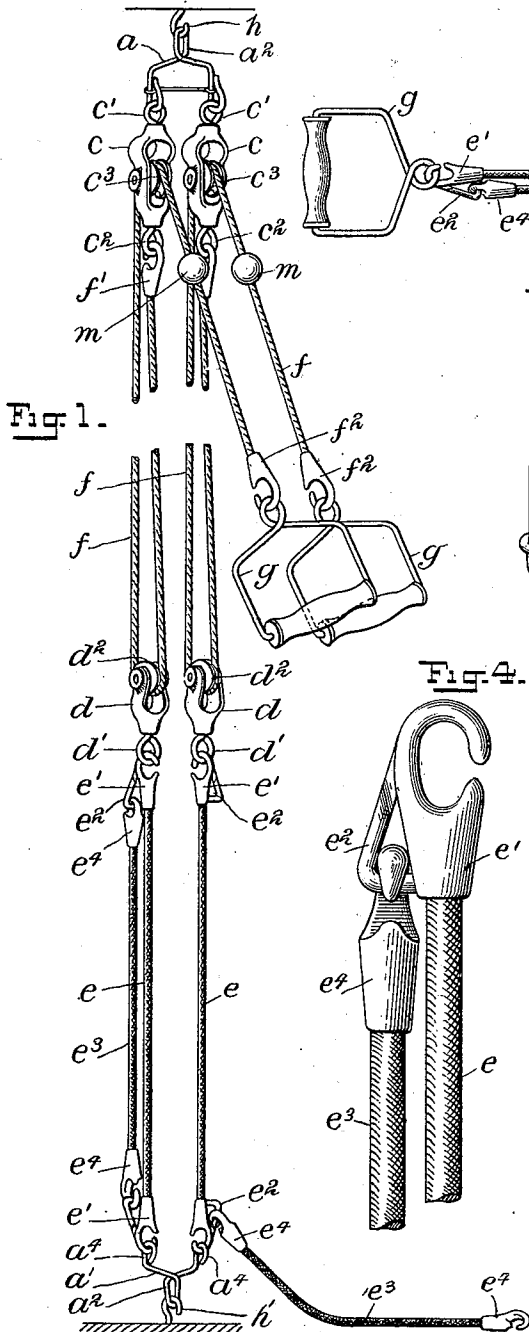


Fig. 1.

Fig. 2.

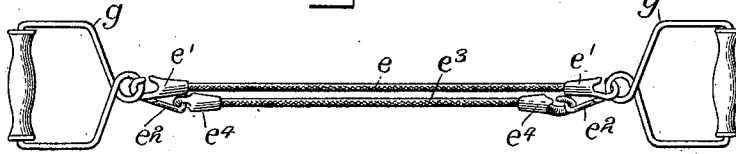


Fig. 3.

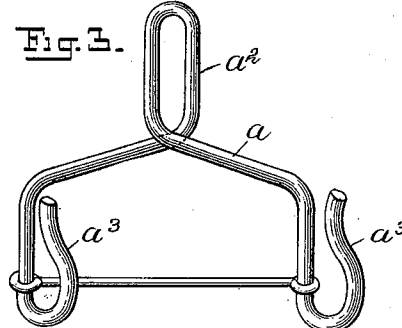


Fig. 4.

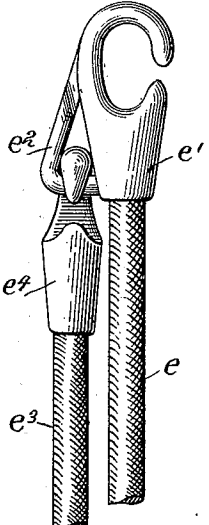


Fig. 5.

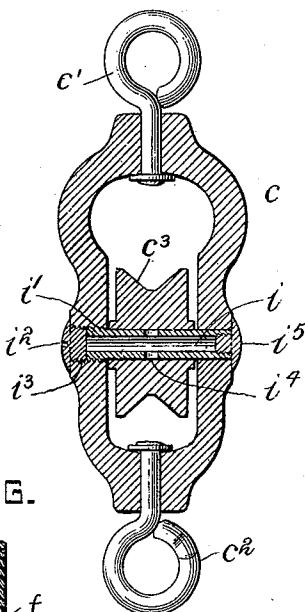
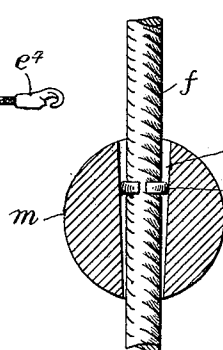


Fig. 6.



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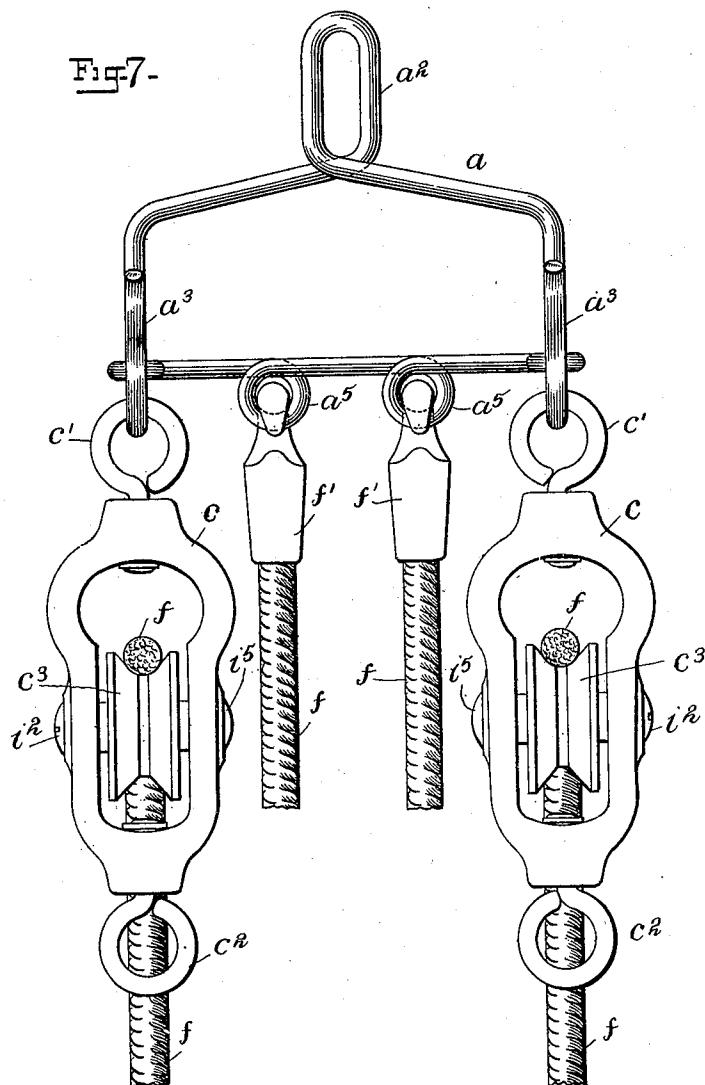
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2 Sheets—Sheet 2.

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EXERCISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 629,655, dated July 25, 1899.

Application filed January 21, 1898. Serial No. 667,384. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BRYON, Jr., a citizen of the United States, residing at New York, (Bay Ridge,) county of Kings, State of New York, have invented certain new and useful Improvements in Exercising Apparatus, of which the following description, taken in connection with the drawings herewith accompanying, is a specification.

This invention relates to that class of exercising apparatus comprising an operating rope or ropes arranged to operate over pulleys and having connection with a suitable resistance medium. In this class of apparatus it is desirable to have two independent means of resistance, whereby each hand of the operator may act free and independent of the other. This has heretofore been accomplished in a so-called "single" apparatus by permanently fastening two separate or single apparatuses upon two boards, which latter are adapted to be screwed or otherwise secured upon the wall and floor, respectively, or upon some other desired supports. Such an apparatus is undesirable, however, in many instances, for the reason that it is not readily adjustable from place to place, and, further, on account of its weight and bulkiness it is not as portable as is desirable.

Having the above in mind, it has been the principal object of my present invention to provide an apparatus having means whereby both hands of the user may have a free action independent of each other, that may be detachably supported in operative position between two hooks or similar supporting means, and be capable of being placed within a very small space when detached from its operative position, so as to be extremely portable and convenient for carrying and shipping.

A further object of my invention is to render such an apparatus capable of every variety of motion that can be obtained by the use of single and double apparatus combined and to otherwise so improve the details of construction of the same as to render them more desirable and capable of the uses for which they are intended.

In the accompanying drawings, Figure 1 represents an exercising apparatus embody-

ing my invention. Figs. 2, 3, 4, 5, and 6 are detail views of different parts of the apparatus to be hereinafter referred to.

As shown in the drawings, my improved apparatus comprises two connected independently-acting parts or apparatuses, each of which is constructed as follows: A pulley-block *c*, having a swiveled eye *c'* and *c''*, supported at opposite ends thereof, is adapted to be detachably connected with a loose frame or bracket *a*. A second pulley-block *d*, having an eye or hook *d'* at one end thereof, is connected with a hook *e'* at the upper end of an elastic rope *e*, which latter at its lower or opposite end is connected with a second loose frame or bracket *a'*. An operating-rope *f*, having a hook *f'* at one end thereof, which is connected with the eye *c''* of the pulley-block *c*, is then passed down under the pulley-sheave *d''* in the block *d*, up over the pulley-sheave *c''* in the block *c*, and provided with a hook *f''* at its free end for the connection therewith of a handle *g*. The said loose frames *a* and *a'* each consist, as herein shown, of a piece of wire bent to form a central loop or eye *a''* for detachable connection with a fixed hook or other support and with its ends extending laterally at opposite sides of said eye and then bent to form either a hook or an eye, according to the construction of the connecting part of the apparatuses, the said ends being formed into hooks *a''* *a'''* on the frame *a* for the connection of the eyes on the pulley-blocks *c c* and into eyes *a''* *a'''* on the frame *a'* for the connection of the hooks *e' e'* at the lower end of the elastic ropes *e e*. It will be obvious, however, that the construction of these loose frames may be materially modified without departure from my invention, as a frame having means for uniting two apparatuses of the character described and detachably supporting the same between two hooks or similar supports, whereby the apparatus as a whole is rendered portable and capable of being readily placed in or removed from an operative position, I consider to be within the scope of my invention.

The apparatus as described may be placed in position in any part of a room or other place by simply fastening two hooks *h* and *h'*

in a desired position and then slipping or placing the eyes of the frames a and a' in connection therewith, as shown.

The two independently-acting parts of the apparatus being supported in detachable connection with the frames a and a' , as described, allows one of such parts to be disconnected from the said frames and supported upon two hooks or eyes in a position opposite the other part, and thus enables the apparatus to be used as what is termed "splits"—i. e., the two parts be so located that the user may take a position between the same. The construction of the apparatus also allows the same as a whole to be reversed from the position shown in Fig. 1 by simply changing the frames a and a' to the opposite supporting-hooks, and thus allow the same to be used for what is termed "floor or rowing exercise."

In order that the resistance afforded by the elastics may be changed or varied to adapt the apparatus for different persons or for different forms of exercise, I have provided the hooks or couplings $e' e'$ at the opposite ends of the elastics e with a loop or eye e^2 for the detachable connection therewith of a second elastic e^3 , which latter is provided with hooks $e^4 e^4$ at each end thereof for connection with said eyes e^2 . By this construction if it is desired to decrease the weight or resistance the user may simply uncouple one end of the elastic e^3 , as shown in Fig. 1, without interfering with the other parts of the apparatus. Another and important feature of the particular means of connection between the two elastics, as desired, is that the hooks on the ends of the second or shortened elastics e^3 being connected with the couplings e' at their lower or smaller end and extending below the latter the pull of both elastics and their couplings is direct. This avoids possibility of the elastics being cut against the edge of the couplings, as would be liable to result in case the couplings of both elastics were hooked into the same eye, and thereby caused to extend at an angle to each other, as will be readily understood.

The double or connected elastics, as described, may also be disconnected from the apparatus and the detachable handles connected therewith, as shown in Fig. 2, and thus form a complete apparatus for certain forms of exercise.

The pulley-sheaves of my improved apparatus are provided with self-lubricating axles, as more clearly shown in Fig. 5, which latter is a longitudinal sectional view through the center of one of the pulley-blocks c . These axles consist of a hollow tube or axle i , which is supported at its ends within openings in the opposite sides of the pulley-blocks and adapted to contain vaseline or other lubricant for the purpose of lubricating the sheaves through openings $i^4 i^4$. This axle is closed at one end by a nut i^5 , which is screwed into the same, and at its opposite end is exteriorly

threaded, as at i' , to have a screw connection with the pulley-block. A jam-nut i^2 , screwed into the threaded opening i^3 in the block against the end of the axle, closes the latter and locks the same from undue movement.

The operating-ropes $f f$ are each provided with a rounded block or ball m thereon at a point between the handle and the pulley-block c , so as to limit the movement of the rope backward through the latter and hold the parts in proper position and connection relative to each other. These blocks according to my invention are held from movement in one direction on the rope in a manner as follows: A split ring n is first clamped upon the rope in a desired position, (see Fig. 6, which represents a section of the rope with the block thereon in cross-section,) and the block m , provided with a tapering opening m' , is then slipped onto the rope and over the said split ring n thereon. The shape of the opening m' in the block tends to wedge the latter more closely upon the ring in the event of the blocks coming into contact with the pulley-blocks.

The loops or eyes a^2 of the loose frames a and a' are elongated, so as to permit of their being readily placed over the supporting-hooks, and are made but slightly wider than the hooks, so as to fit closely thereon and be held from undue turning. In this manner the frames, and thereby the apparatus, are firmly supported in proper position.

Referring to Fig. 7 I have shown the loose frame a provided with two eyes $a^5 a^5$ for the detachable connection therewith of the hooks $f' f'$ at the end of the ropes $f f$. This construction permits of the stationary end of the ropes being connected with either the said frame or the pulleys $c c$, as may be desired. When the ropes are connected directly with the frame a , as described, the downward strain that would be produced by the same upon the pulleys if connected with the latter is avoided, thereby allowing said pulleys more freedom to swing outward from the wall when the apparatus is being used.

Having thus set forth my invention, what I claim, and desire to secure by Letters Patent, is—

1. A portable exercising apparatus, comprising two sets of pulleys and connections, and a pair of attaching frames or brackets to which the two sets of pulleys and connections are separately connected, provided with means for detachable connection with a suitable support, each set of pulleys and connections comprising a pair of pulleys, a non-elastic rope running over said pulleys and having one end connected with a vertically stationary part of the apparatus and its opposite end provided with a handle, and an elastic connection attached at one end to one of the pulleys and at its opposite end to one of the attaching frames or brackets, substantially as and for the purpose set forth.

2. In a portable exercising apparatus, the combination with two attaching frames or brackets, of two sets of ropes and pulleys, handles on the ropes, and two sets of interchangeable elastic connections attached at one end to the pulleys and at the opposite end to one of the frames or brackets, each set consisting of a plurality of members capable of being employed individually or collectively.

3. A portable exercising apparatus, comprising an elastic cord provided with terminal couplings, each having an integral loop at one side thereof, and an auxiliary elastic cord having terminal couplings for detachable connection

with said loops of the first-mentioned couplings, for the purpose set forth.

4. In a portable exercising apparatus, the combination with ropes and pulleys, and elastic connections, of a fixed hook and an attaching frame or bracket comprising diverging portions with bent extremities and a central oblong eye the internal width of which is approximately equal to the thickness of the fixed hook, substantially as described.

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Witnesses:

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