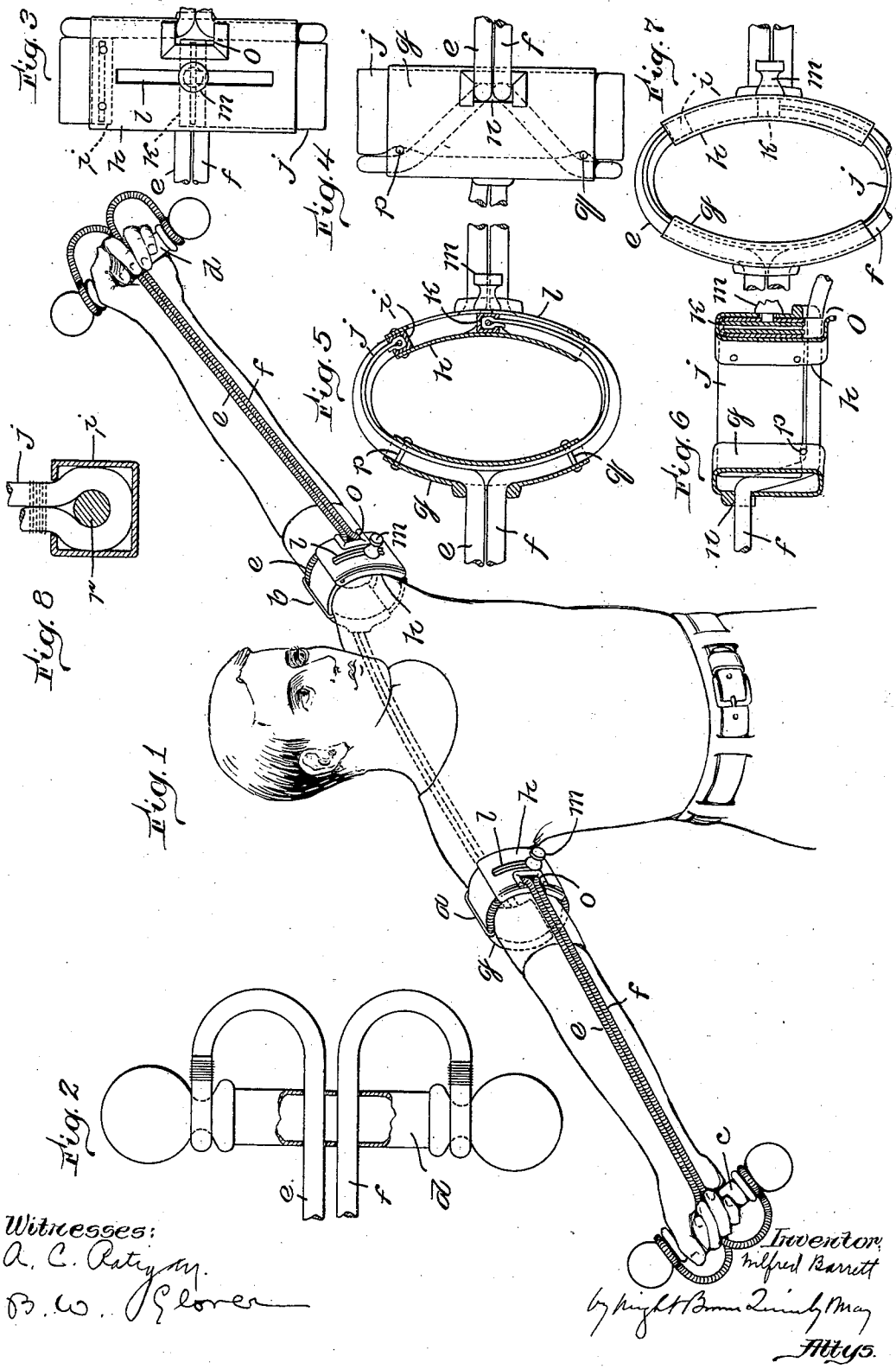
No. 886,032. PATENTED APR. 28, 1908.

W. BARRETT.

EXERCISER.

APPLICATION FILED SEPT. 11, 1907.



THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILFRED BARRETT, OF WALTHAM, MASSACHUSETTS.

EXERCISER.

No. 886,032. Specification of Letters Patent. Patented April 28, 1908.

Application filed September 11, 1907. Serial No. 392,252.

To all whom it may concern:

Be it known that I, WILFRED BARRETT, of Waltham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Exercisers, of which the following is a specification.

The present invention relates to an apparatus for exercising the muscles of the back, chest, shoulders and arms, which is used by being fitted upon the person without necessitating its being hung from hooks or brackets in the wall, and being of the simplest construction and fewest possible parts.

It is the object of the invention to provide an exerciser which, while being simple in construction, of few parts, noiseless, and capable of being used in any position independently of any external support, will yet be capable of resisting the movement of the user's members in many ways, and thus efficiently exercise the muscles.

A suitable construction in which the principles of my invention may be embodied is shown in the accompanying drawings, in which,—

Figure 1 represents the manner in which my exerciser is applied and used. Fig. 2 represents one of the hand grips, showing how the length and tension of the elastic cords may be adjusted. Fig. 3 represents an elevation of one of the arm bands, showing the side which is placed on the front of the arm. Fig. 4 represents a rear view of the arm band. Fig. 5 represents a section of the same transverse to its axis. Fig. 6 represents a cross section through its shorter diameter. Fig. 7 represents an edge view of the band. Fig. 8 represents a detail sectional view, showing the manner in which the end of the elastic webbing forming the arm band is secured.

The same reference characters indicate the same parts in all the figures.

The apparatus consists of arm bands *a* and *b*, bars *c* and *d* forming grips for the hands, and elastic cords *e* and *f* which are fastened at their ends to the grips and pass around the bands. The arm bands consist of metallic shells *g* which are located, when the apparatus is in use, at the back of the arm, and *h* which lies at the front of the arm. Secured in the shell *h* at one end is a shoulder *i* in which one end of a strip *j* of elastic webbing is secured. This strip of webbing passes through the shell *g* and into the other end of the shell *h*, being secured at its end to an adjustable block *k*. This block carries a stud passing through a slot *l* in the shell *h* on which is threaded a clamping nut *m*. By locating the block *k* in the required position, the band may be made to surround the arm with any desired tension. The elastic cords pass through an opening *n* in the rear of each of the shells *g*, separate and pass around the arm of the user, and emerge through an opening *o* in front of the shell *h*. These cords are deflected and passed around studs *p* and *q* so as to resist their slipping through the shells. The ends of the cords pass through holes in the bars *c* and *d* and are made fast to the ends of the grips. The holes through which they pass are sufficiently sunk to hold them with considerable friction, so that after they have been pulled through by the amount necessary to give the desired tension, they will not be drawn back by the pull given in ordinary use.

The blocks *i* and *k* in which the ends of the elastic strips *j* are held are formed as open-ended shells, each having a slot in one side. The end of the webbing is doubled over around a pin *r* and slipped endwise into the shell, passing through the slot in the side. The enlargement formed by the pin prevents its withdrawal from the slot.

In preparing to use the apparatus, the bands are slipped upon the upper arms, and the lengths of the various portions of the cord are adjusted so that there will be a tension across the back when the shoulders are thrown forward, and a tension on the end members of the cord when the arms are straightened. Also the elastic bands are adjusted so that the tension will be felt when the muscles of the upper arm are flexed. Thus the various members of the device resist the action of the muscles either in extending or bending the arms or swinging them about the shoulder joint so that a resistance is opposed to any movement of the muscles in these parts of the body, enabling them to be greatly exercised and developed.

I claim:—

1. An exerciser consisting of elastic members each of which is independently adjustable in length and which are adapted to be supported on the body so as to extend across the shoulders and along each arm.

2. An exerciser consisting of elastic bands adapted to surround the arms and resist the flexing of the muscles thereof, elastically

extensible members engaged with said bands so as to extend across the shoulders and along the arms, and grips attached to the ends of the arm members.

3. An exerciser consisting of elastic bands adjustable as to tension and adapted to surround the arms, and elastic cords held by said bands and arranged to cross the shoulders and pass along the arms of the user.

4. An exerciser consisting of elastic bands adapted to surround the arms of the user, hand grips, and elastic cords attached at their ends to said grips and confined and guided from the rear to the front side of the arms by said bands.

5. An exerciser consisting of elastic bands adapted to surround the arms of the user, hand grips, and elastic cords attached at their ends to said grips and confined and guided by said bands, said cords being held adjustably both by the bands and the grips so as to provide independently adjustable back and arm sections or members, which can be made conformable to the breadth of shoulder and length of arm of any user.

6. An exerciser consisting of bands to surround the upper arm of the user, each of said bands having a cord-guiding portion, an elastic cord or web adapted to extend horizontally across the back of the user, passing from one band to the other, said cord being confined in the guiding portions of said bands and led thereby from the rear to the front side of the user's arms, and hand grips to which the ends of said cord are fastened.

7. An exerciser consisting of bands to surround the upper arm of the user, each of said bands having a cord-guiding portion, a pair of elastic cords or webs adapted to extend horizontally across the back of the user, passing from one band to the other, said cords separating at the bands and led by the guiding portions thereof respectively around the outer and inner sides of the arms from the back to the front thereof, where they again join, and hand-grips to which the ends of said cords are fastened.

8. An exerciser comprising arm-encircling bands, consisting of rigid shells and elastic webbing adjustably secured to said shells so as to vary the circumferences of the bands, elastic cords passing through and adjustably held in said shells, and handles to which the ends of the cords are attached.

9. In an exerciser, elastic arm-encircling bands, each consisting of separated rigid members and elastic strips secured adjustably at their ends to one of the rigid members and passing freely around the other.

10. In an exerciser, elastic arm-encircling bands, each consisting of separated rigid metallic shells, and an elastic strip passing freely through one of the shells and attached at its ends to the other, the attachment of one of the ends of said strip being adjustable.

In testimony whereof I have affixed my signature, in presence of two witnesses.

WILFRED BARRETT. [L. S.]

Witnesses:

MICHAEL P. KENNELY,

ALBERT L. PARTRIDGE.