

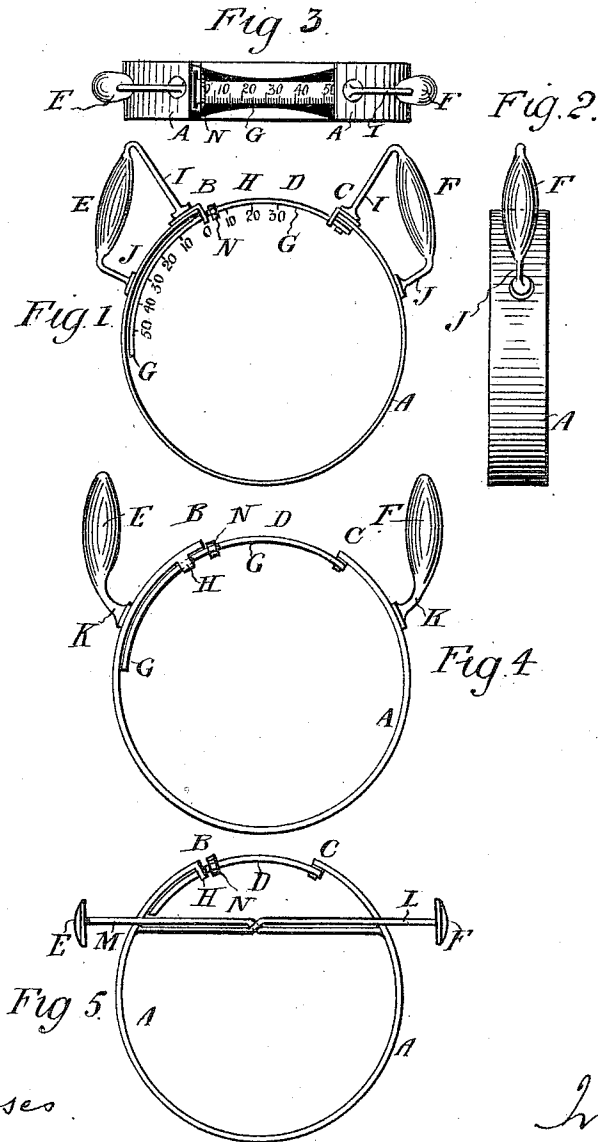
R. BLAKOE.

DEVICE FOR DEVELOPING AND STRENGTHENING THE MUSCLES OF THE BODY AND ARMS.

APPLICATION FILED MAY 19, 1909.

964,745.

Patented July 19, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT BLAKOE, OF GLASGOW, SCOTLAND.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROBERT BLAKOE, of 5 Clifton Place, Sauchiehall street West, Glasgow, Scotland, lecturer on anatomy, have invented certain new and useful Devices for Developing and Strengthening the Muscles of the Body and Arms, of which the following is a specification.

This invention has for its object to provide a device for the developing and strengthening of all the body muscles, and arm muscles.

In carrying out my invention, I provide a part circle or arc of tempered spring steel or other metal having two handles or grips suitably fixed thereto near to the ends of the arc or terminals of the part circle. At or near the open part of the circle or arc or bridging the gap formed thereof, I fix a scale blade marked in lbs. which is loosely connected with one end of said arcuate member and is fixed to the opposite side thereof. In place of having the scale blade at or near the center I may have it carried on guides between the gap.

In use, the person takes hold of the two handles and endeavors to close the open space between the two ends of the spring, and in doing so the combined effort of all the most important trunk muscles together with all muscles of the hands, wrists and arms are put into exercise, and the person using the appliance has in view the scale blade marked in pounds and showing the result of the effort made. Increases in physical strength can thus be accurately gaged day by day.

The appliance can be of round, oval, or other shape, and of one or more pieces of metal as may be desired.

The above appliance, is designed to develop and strengthen the following important muscles:—all flexors, and extensors of the arms; deltoids; pectorals; neck muscles; abdominal muscles; serratus muscles; latissimus dorsi; as well as others.

In order that my invention may be properly understood and readily carried into effect, I have hereunto appended one sheet of drawings, of which—

Figures 1, 2 and 3 are front elevation, side elevation and plan respectively of the developer embodying my invention. Fig. 4 is a similar view to Fig. 1 of the developer formed of a strong steel blade and therefore requiring a more rigorous exercise of the

muscles in the use of the same. Fig. 5 is another form of the developer in which in the operation of opening the gap the muscles of the back are brought into action, all hereafter more fully referred to and described. 60

From the drawings it will be seen that the developer consists of a steel hoop or flat ring A with its circumference incomplete, or a portion thereof cut away, as at B and C, and the gap D there formed is capable of 65 being more or less closed, and the force required to close it or bring the points B and C toward each other is suitably indicated as will hereinafter more fully appear.

E and F indicate the handles disposed on 70 the exterior of the hoop or ring A aforesaid and which are grasped by the hands of the user in the muscular action of bringing the parts together as aforesaid. The gap is bridged across, as seen, by a circular or con- 75 centric blade or band of steel G which is graduated in lbs. from 0 to 50, or further if desired.

Fig. 3 illustrates the width of the concentric scale blade as compared with hoop 80 or flat band A. This concentric blade or band of steel G is twice the length of the gap or opening D graduated in opposite directions, as seen in Fig. 1, and is designed to register both in opening and closing the 85 space constituting the gap or opening D aforesaid. The concentric scale blade or band G is attached to the hoop or flat ring A at the part C, while the other end thereof is passed through an eye or slotted bracket 90 piece H in which it works freely. The handles may be in the form shown in Fig. 1, each handle having two shanks I, J, which are clamped to the hoop or ring A in two 95 places as shown, or in the form shown with a single shank or stem K, or of any other suitable form.

In Fig. 5, the handles E and F are attached to long rods L, M, which are so bent and designed as to cross each other as seen. 100 The ends of these rods aforesaid are attached to the hoop or ring A on its inner circumference. The concentric scale blade G registers the opening and closing of the gap D as in the two forms previously referred to 105 and is particularly adapted to bring into action the muscles of the back. The concentric scale blade may be provided with a slidable marker N for reading the different expenditure of strength given in lbs. 110

Claims.

1. A physical developing device comprising in combination, an arcuate member of yielding material formed with its ends normally spaced apart from each other, handles secured to the ends of said member, and a curved graduated scale connected to one end of said member and extending beyond and loosely connected with the other end of said member for indicating the amount of power applied to said handles.

2. A physical developing device comprising in combination, an arcuate member formed of yielding material, gripping devices secured to said member adjacent the ends thereof, a graduated member concentrically arranged with respect to said arcuate member and bridging the gap between the ends thereof, said graduated member being secured to one end of the arcuate member and slidably connected with the other

end thereof for indicating the amount of power applied to said devices.

3. A physical developing device comprising in combination, an arcuate member formed of yielding material having end portions normally spaced apart, gripping devices secured to said member, a graduated element secured to one end portion of said member and loosely connected with the other end portion thereof, and a marker slidably mounted on said element and arranged to be actuated by said other end portion of said member for reading on said element the amount of power applied to said device.

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

ROBERT BLAKOE.

Witnesses:

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JOHN TRAIN LIDDLE.