A. LIMOGES. EXERCISER.

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906,538. Patented Dec. 15, 1908. Witnesses: Facompreh Attorneys

## UNITED STATES PATENT OFFICE.

ALFRED LIMOGES, OF VERNER, ONTARIO, CANADA.

## EXERCISER.

No. 906,538.

Specification of Letters Patent.

Patented Dec. 15, 1908.

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To all whom it may concern:

Be it known that I, Alfred Limoges, a subject of the King of Great Britain, residing at Verner, in the county of Nipissing, 5 Province of Ontario, Canada, have invented certain new and useful Improvements in Exercisers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention relates to exercisers or apparatus adapted for physical development, and more particularly to the exercise

15 of the wrist and hand.

Broadly speaking, it comprises a framework in which is movably mounted a freely rotatable bar adapted to be grasped from opposite sides by two or more persons, and means for moving the bar to such position as will allow it to be grasped by persons of varying height.

To more clearly disclose the construction, operation and use of the device, reference should be had to the accompanying drawings forming part of the present invention.

In the drawings similar reference characters designate like parts in the several views.

In the drawings,—Figure 1 is an end elevation; Fig. 2 is a section on line 2—2 of Fig. 1; and, Fig. 3 is a section on line 3—3 of Fig. 2 showing the guides for raising and lowering the bar, in detail.

Referring to the drawings in detail, 1 rep-35 resents a suitable framework provided with uprights 2 at opposite sides. To the uprights 2 are secured in any suitable manner angle irons 3. These irons are so placed as to form guide ways in which flanged racks 40 4 may reciprocate freely, the flanges of the racks being embraced by the irons and traveling freely between the irons and the uprights 2. Cross bars 5 are carried by the frame 1. To the cross bars 5 are secured 45 journal boxes of any well known form or type and in these journal boxes is mounted a shaft 6 provided with pinions 7 which mesh with the teeth of the racks 4. To one end of the shaft is secured a crank or other well 50 known device by which the shaft may be rotated.

In the upper ends of the rack 4 is carried the freely rotatable rod 8 which is adapted to be grasped and used as an exerciser or developer.

In using the device the shaft 6 is rotated to raise and lower the racks 4 and rod 8, as will be readily understood, and when the rod has come within reach of the persons desiring to use it, it is grasped firmly by them 60 from opposite sides, those on one side trying to turn the rod in a direction opposite to the direction attempted by those on the other side.

It is preferable to grasp the rod with the 65 hands at full arms length and extend it above the head. In this way only the muscles of the wrist and hand are brought into play and consequently, the device acts primarily as a wrist and hand developer, as de- 70 sired. However, it may be used to very good advantage by grasping with the hands extended at arms length at approximately shoulder height. Of course, when the rod has been brought within reach the shaft 6 75 may either be held by hand to lock the rod against further upward or downward movement, or any suitable or well known means may be used to lock the shaft against further or reverse rotation.

Many changes in the construction and arrangement of the separate parts of the device, many other combinations of these parts, and many other applications of the device may be resorted to without in any way desparting from the field and scope of the present invention, and it is meant to include all such within this application, wherein only one preferred form of the invention has been illustrated in order to more clearly describe 90 the same.

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

In an exerciser of the character described, 95 a framework, uprights secured thereto, racks slidably mounted on said uprights, a revoluble bar carried by said racks, a shaft carried by said framework, and pinions secured to said shaft and adapted to mesh with the 100 aforesaid racks to raise and lower the same.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

## ALFRED LIMOGES.

Witnesses:
E. J. Guenette,
Albert T. Emard.