No. 684,117. Patented Oct. 8, 1901.

W. W. SLOAN, JR.

EXERCISER.

(Application filed Apr. 30, 1901.)

(No Model.)

FIG. 1.

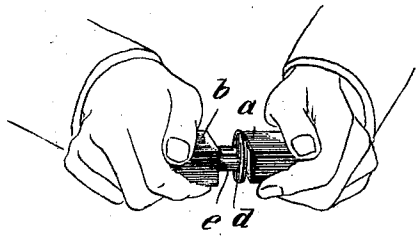


FIG. 2.

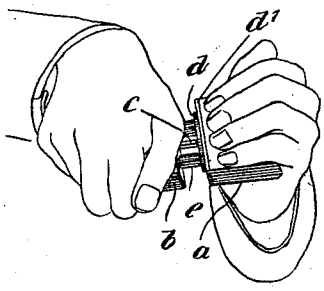


FIG. 3.

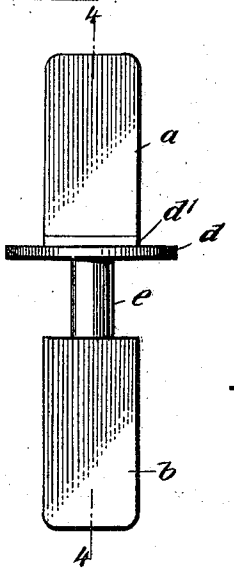


FIG. 4.

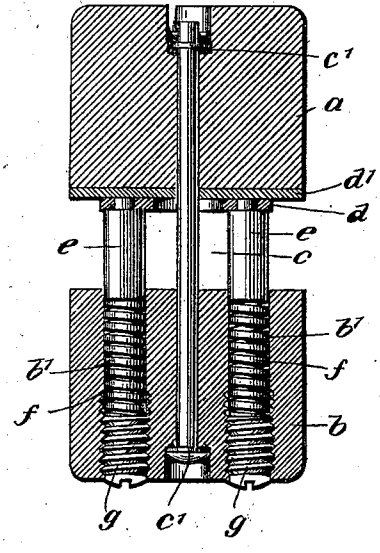
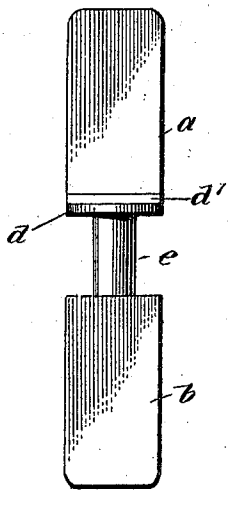


FIG. 5.



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EXERCISER.

SPECIFICATION forming part of Letters Patent No. 684,117, dated October 8, 1901.

Application filed April 30, 1901. Serial No. 58,119. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WILSON SLOAN, Jr., a citizen of the United States, and a resident of Buffalo, in the county of Erie and State of New York, have invented a new and Improved Exerciser, of which the following is a full, clear, and exact description.

This invention relates to an exercising device designed for developing the muscles of the wrists and arms; and it consists, briefly stated, in two hand-blocks which are connected together to turn relatively to each other and which have a friction device bearing between them, so that by relatively turning the blocks the various muscles of the arms and wrists may be brought into play and thereby developed.

This specification is a specific description of two forms of the invention, while the claims are definitions of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figures 1 and 2 are perspective views illustrating the use of the invention. Fig. 3 is an elevation of the invention. Fig. 4 is a section on the line 4 4 of Fig. 3, and Fig. 5 is an elevation of a slightly-modified form of the invention.

a and *b* indicate the hand-blocks, and *c* indicates a tie-rod which passes centrally through these blocks and holds them together, forming at the same time the axis whereon the blocks may relatively turn, each block being loosely mounted on the tie-rod.

d indicates an annular friction-plate of metal which bears on a metallic wear-plate *d'*, fastened to one of the blocks *a*. The wear-plate *d'* is rectangular in form to conform to the shape of the hand-block, and the friction-plate *d* may, if desired, be made annular, as in Figs. 1, 2, and 3, or it may be made oblong or rectangular, as indicated in Figs. 4 and 5. Pins *e* are attached to the friction-plate *d* at opposite sides of the tie-rod *c* and project into passages *b'*, formed longitudinally in the hand-block *b*. In these passages are arranged expansive springs *f*, which press against the pins *e*, and screws *g* are fitted in the outer ends of the passages *b'* and bear against the springs to regulate the tension thereof. If desired, washers *c'* may be placed in the blocks *a* and *b* to engage the nuts on the tie-rod *c*.

The springs *f* force the friction-plate *d* against the wear-plate *d'*, so that the work of turning the blocks relatively to each other will involve considerable exercise. The degree of this exercise may be regulated relatively by adjusting the screws *g*, which regulate the tension of the springs *f*. If desired, the wear-plate *d'* may be dispensed with. It is merely sufficient that the tie-rod have loose connection with each block and constitute the axis on which they may be turned relatively.

In using the invention the blocks are grasped one in each hand and a number of very efficient movements may be made, all of which involve the twisting of the blocks around their axes. It is not necessary for me to explain in detail these movements, since they will be apparent, and, indeed, may be multiplied indefinitely.

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

1. An exerciser, comprising two handpieces, a pin pivotally connecting the same together to turn around a common center, and means working between said handpieces for resisting the independent turning thereof.

2. An exercising device, comprising two handpieces, a pin pivotally connecting the same together to turn relatively around a common center, and a spring-pressed member working between the handpieces to resist the turning movement thereof.

3. An exercising device, comprising two handpieces connected together to turn relatively around a common center, a friction-plate bearing on one handpiece, and a spring engaging the other handpiece and the friction-plate and pressing the friction-plate into active position.

4. An exercising device, comprising two handpieces connected together to turn rela-

tively around a common center, an annular friction-plate bearing on one of the handpieces, a pin connected to the friction-plate and extending to the other handpiece, and a spring carried by the said other handpiece and pressing the pin, for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM WILSON SLOAN, JR.

Witnesses:

ALFRED L. HARRISON,

WILLIAM F. SMITH.