

J. P. STOREY.
 EXERCISING APPARATUS.
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972,284.

Patented Oct. 11, 1910.

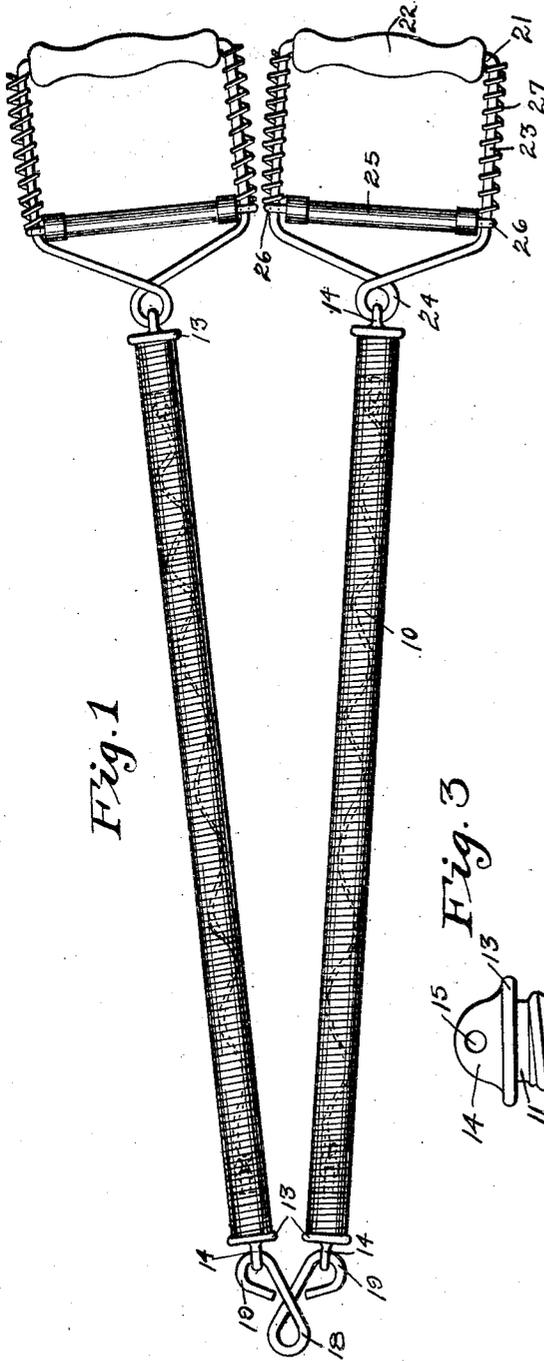


Fig. 1

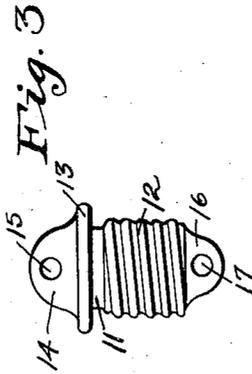


Fig. 3

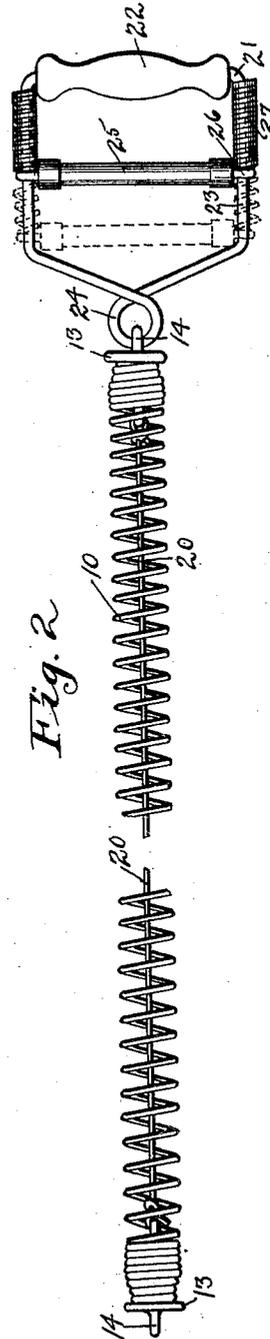


Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

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EXERCISING APPARATUS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN P. STOREY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a certain new and useful Exercising Apparatus, of which the following is a specification.

The object of my invention is to provide an exercising apparatus of simple, durable and inexpensive construction that may be readily and easily attached to any suitable support and that may be used by the operator for exercising the various muscles of his body especially the muscles of the fingers and forearm.

More specifically, it is my object to provide a device of this kind with handles of simple and inexpensive construction so arranged that they may be grasped in the ordinary way, or both parts of the handle may be grasped between the fingers and used for the purpose of developing finger and forearm muscles, and, further, to provide a spring-actuated device of this kind in which the movement of the springs is limited.

My invention consists in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 shows a plan view of a complete exercising apparatus embodying my invention. Fig. 2 shows a detail, plan view of one part of the device with the main spring in an extended position to show the limiting wire, and with the auxiliary handle moved to its position adjacent to the main handle, the normal position of the auxiliary handle being indicated by dotted lines, and Fig. 3 shows a detail view of one of the terminals for the main springs.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate one of the main springs of the device. Said spring is formed of a single wire coil in such a manner that the coils normally engage or stand close to each other so that when the spring is extended longitudinally it will tend to contract and return to its normal position. At each end of the spring, I have provided a terminal comprising a cylindrical body portion 11 having formed thereon a spiral groove 12, said groove being of such size and shape as to be

capable of screwing into one end of the spring 10.

At one end of the body portion 11 is a circular head 13 to engage the end of the spring 10, and this head is provided with a lug 14 having an opening 15 therein. At the other end of the body portion is a lug 16 provided with an opening 17. For connecting the two main springs 10 together, I have provided a device formed of a single piece of wire and having its central portion bent to form a loop 18 and its ends provided with hooks 19 designed to enter the openings 15. In this way the loop 18 provides means for attaching the exercising apparatus to a hook or other support and the hooks 19 provide such a universal connection for the terminals of the main springs that said terminals are enabled to move to a limited extent toward and from each other. A similar terminal is provided at each end of each main spring, and the lugs 16 with the openings 17 therein are for the purpose of providing means for attaching a limiting wire 20 to the terminals. This limiting wire is preferably made of coiled spring metal so arranged that when the spring 10 is in its normal position, the limiting wire 20 will remain coiled within the body of the main spring, see dotted lines in Fig. 1, and when said main spring is pulled out to its limit, the wire 20 will become taut, as shown in Fig. 2, and thus prevent further outward movement of the main spring.

Connected with each of the main springs is a handle device the frame of which is formed of a single piece of wire with its ends 21 inserted in the handle 22, its sides extended at right-angles to the handle and parallel with each other at 23, and its central portion formed into a loop 24 which is passed through the opening 15 of the adjacent terminal.

I have provided a finger exercising device for the handle, comprising an auxiliary handle portion 25 having loops 26 at its ends slidingly mounted on the sides 23 of the handle frame, and coiled upon the sides 23 between the hooks 26 and the ends 21 are the extensible springs 27 to normally hold the auxiliary handle 25 at its limit of movement away from the main handle 22. However, said auxiliary handle 25 is in such position that an operator may grasp both the main handle 22 and the auxiliary handle 25, and by drawing them toward each other

may exercise his fingers, and when said auxiliary handle is moved to its limit toward the main handle, the springs 27 will return it to its normal position.

5 In practical use and assuming that the hook 18 is connected to a stationary support, it is obvious that the operator may, if desired, grasp both of the handles 22 and may operate the exercising apparatus by successively stretching the springs 10 and then permitting them to contract to normal position. 10 This exercise may be varied at the will of the operator to a hand exercising movement by simply placing his fingers over the auxiliary handle portion 25, and in this way 15 using the device for exercising his fingers.

I claim as my invention:

20 An exercising apparatus of the class described, comprising two contractible coiled wire springs, each having a terminal in each end comprising a cylindrical body portion with a spiral groove therein to receive a spring wire, and each also having a perforated lug at each end, a connecting device 25 for the springs formed of a single piece of wire having a loop at its central portion and

hooks at its ends designed to enter the perforations in the lugs of two of said terminals, each spring also having a limiting device comprising a piece of coiled spring wire 30 contained within the main spring and fixed to the perforated lugs at the inner ends of said terminal, each spring being also provided with a handle device comprising a main handle, a handle frame formed of a 35 single piece of wire with its ends inserted in the end of the main handle and its sides arranged parallel with each other at right-angles to the handle and its central portion formed into a loop, which loop is extended 40 through the perforated lug on the adjacent terminal, an auxiliary handle on said parallel sides of the handle frame, and extensible coil springs on said parallel sides to engage the auxiliary handle and normally hold 45 it away from the main handle.

Des Moines, Iowa, Aug. 24, 1909.

JOHN P. STOREY.

Witnesses:

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