

No. 620,453.

Patented Feb. 28, 1899.

A. A. HENDRICKSON.
EXERCISING MACHINE.

(Application filed Sept. 21, 1898.)

(No Model.)

Fig. 1.

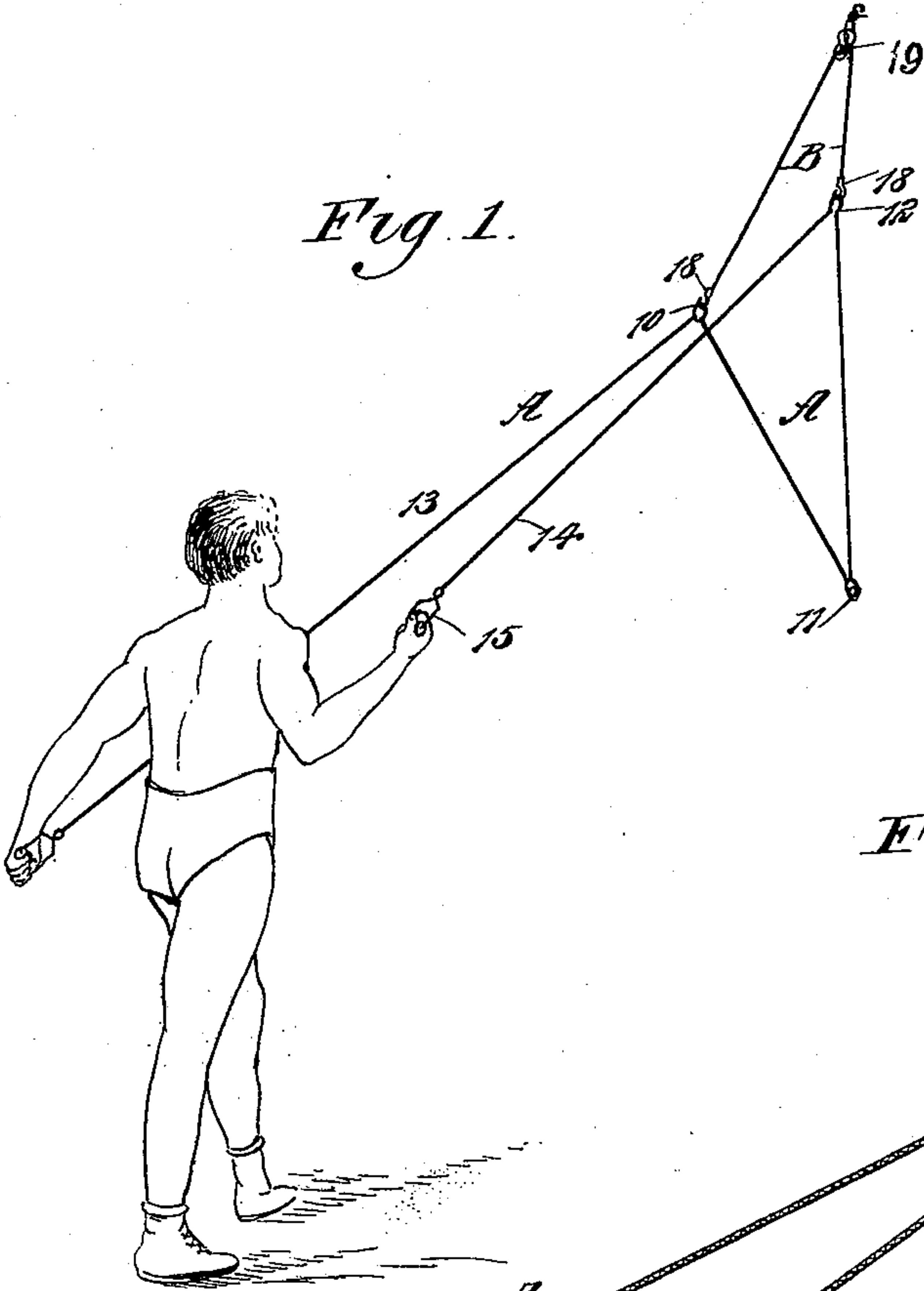


Fig. 2.

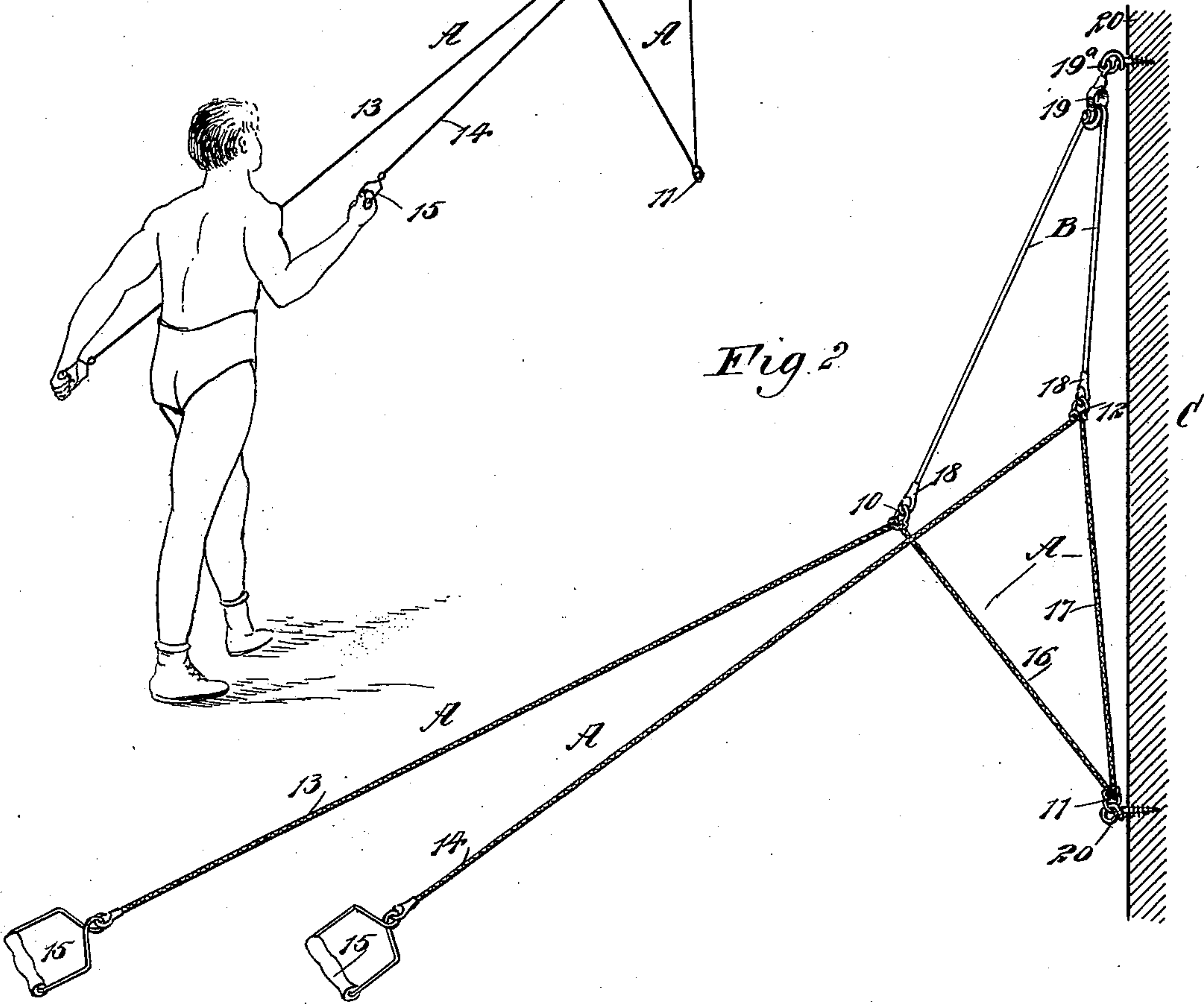


Fig. 3.

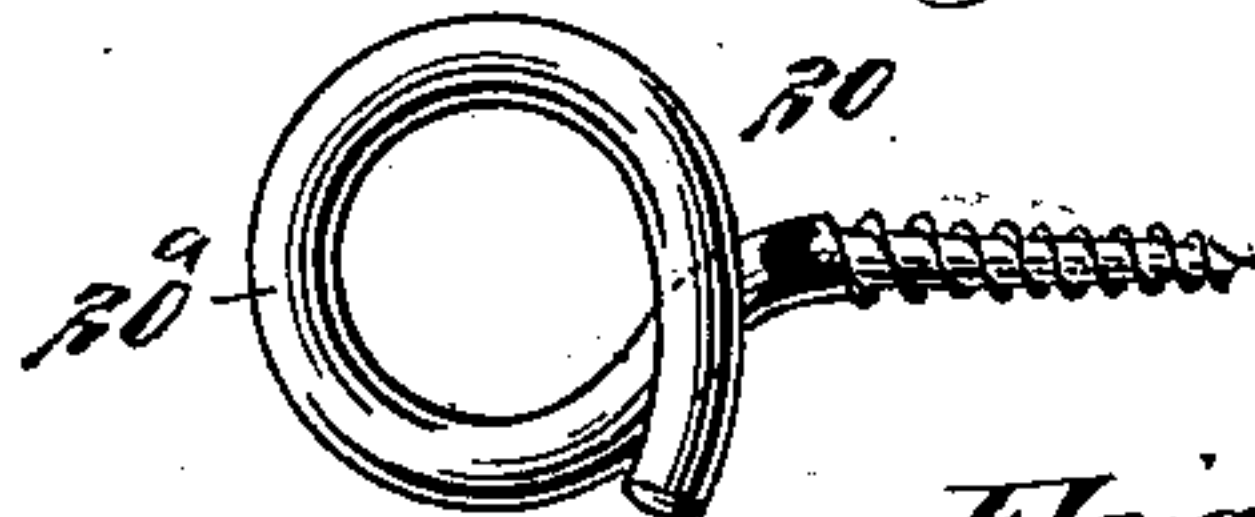
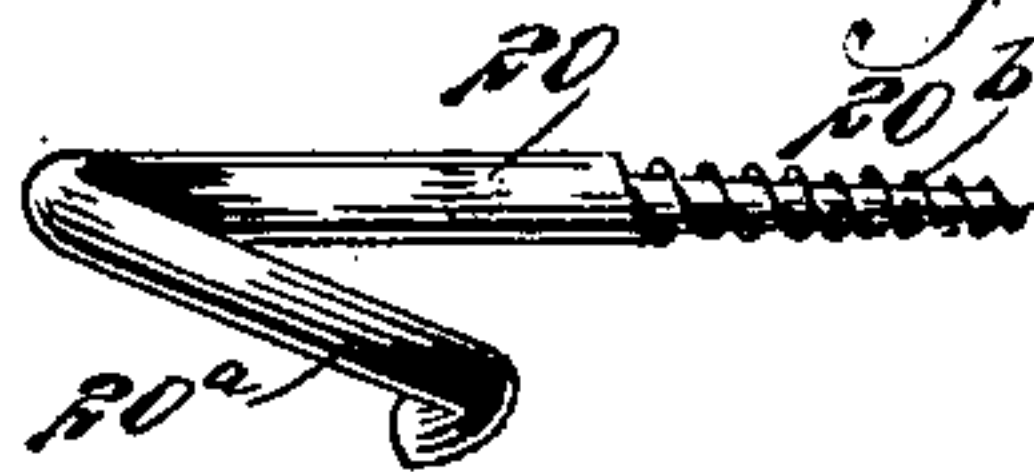


Fig. 4.



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EXERCISING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 620,453, dated February 28, 1899.

Application filed September 21, 1898. Serial No. 691,513. (No model.)

To all whom it may concern:

Be it known that I, ABRAM A. HENDRICKSON, of the city of New York, (Hollis,) borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Exercising-Machine, of which the following is a full, clear, and exact description.

My invention relates to that class of exercising-machines known as "weightless" machines and in which elastic cords are employed.

The object of the invention is to construct a machine of the above character that will be simple, durable, economic, readily set up or taken down, and through the medium of which more beneficial results may be obtained and a greater variety of movements accomplished than is possible when the ordinary elastic-cord machines are employed.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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 figures.

Figure 1 is a view illustrating the application of the machine. Fig. 2 is a perspective view of the machine drawn on a larger scale, and Fig. 3 is a side elevation of an improved screw-eye employed in connection with the said machine, and Fig. 4 is an edge view of the said screw-eye.

What may be termed the "body portion" of the machine consists of an elastic cord A of suitable diameter. This elastic cord is attached at a predetermined distance from one end to an eye 10, from whence the cord is carried to a second eye 11, and from the said second eye to a third eye 12, the length of the cord between the eyes 10 and 11 being preferably the same as the length of cord between the eyes 11 and 12, and after the elastic cord is attached to the eye 12 the second end is carried in the same direction as the first end of the cord and the length of the two ends of the cord is preferably the same. In fact, the elastic cord when connected to the rings or eyes 10, 11, and 12, as specified, may be said to comprise two main sections 13 and 14, to each of which a handle is attached, and

two converging anchoring-sections 16 and 17, adapted for attachment to a support, as will be hereinafter described. The elastic cord is preferably knotted or tied to the rings, as shown in Fig. 2, and when the device is in operation the tributary sections are at an angle to the main sections.

In addition to the elastic cord A a non-elastic cord B is employed, and this non-elastic cord is attached at its ends by means of clips 18 or other fastening devices to the eyes 10 and 12, which when the machine is set up are the uppermost eyes. The non-elastic cord, before being attached to the eyes or rings 10 and 12, is passed through a block and over a pulley 19, the said block being provided at its upper end with an eye 19^a.

Only two screw-eyes 20 are needed to place the exercising-machine in position upon the upright surface C, as shown best in Fig. 2. The screw-eyes are preferably constructed with a spirally-formed head 20^a and a threaded or screw shank 20^b. It is evident that when the head of a screw-eye is constructed as illustrated and described the eyes or rings 20, adapted for connection with said screw-eyes, may readily pass into the head portions of the screw-eyes and as conveniently be removed. The screw-eyes 20 are placed one above the other in preferably the same vertical plane a predetermined distance apart, the eye of the block carrying the pulley 19 being made to connect with the head of the upper screw-eye, and the lower ring or eye 11, attached to the elastic cord A, is made to connect with the head of the lower screw-eye.

In the operation of this exercising-machine one of the main sections may be held stationary by one hand, while the other main section is brought into action or is extended, as shown in Fig. 1, and, furthermore, in practice the two main sections are alternately extended and held stationary. It is evident that by connecting the non-elastic cord with the elastic cord at the junction of its main and anchorage sections and causing the non-elastic cord to pass over a pulley fixed to a support, the anchorage-sections being likewise attached to a support, as the main sections are extended the non-elastic cord will cause the anchorage-sections of the elastic portion of the device to be likewise extended, and in

this manner the anchorage-sections are the equivalents of weights usually employed in weighted exercising-machines.

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

1. In an exercising-machine, the combination, with an elastic cord adapted to receive
10 handles at its ends and provided with an eye about centrally between its ends, adapted for attachment to a support, also opposing auxiliary eyes between the supporting-eye and the ends of the cord, of a non-elastic cord attached to the auxiliary eyes of the elastic
15 cord, and a pulley over which the non-elastic cord is passed, as described.

2. An exercising-machine consisting of an

elastic cord, eyes to which the cord is secured, said eyes dividing said elastic cord into four
sections, comprising separate handle-sections 20 and two converging sections adapted for attachment to a support at their converging ends, and a non-elastic cord attached to the eyes of the elastic cord at the junction of its handle and converging or supporting sections, 25 the non-elastic cord being adapted to extend in an opposite direction to the converging or supporting sections of the elastic cord, and a pulley over which the non-elastic cord is passed, as specified.

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