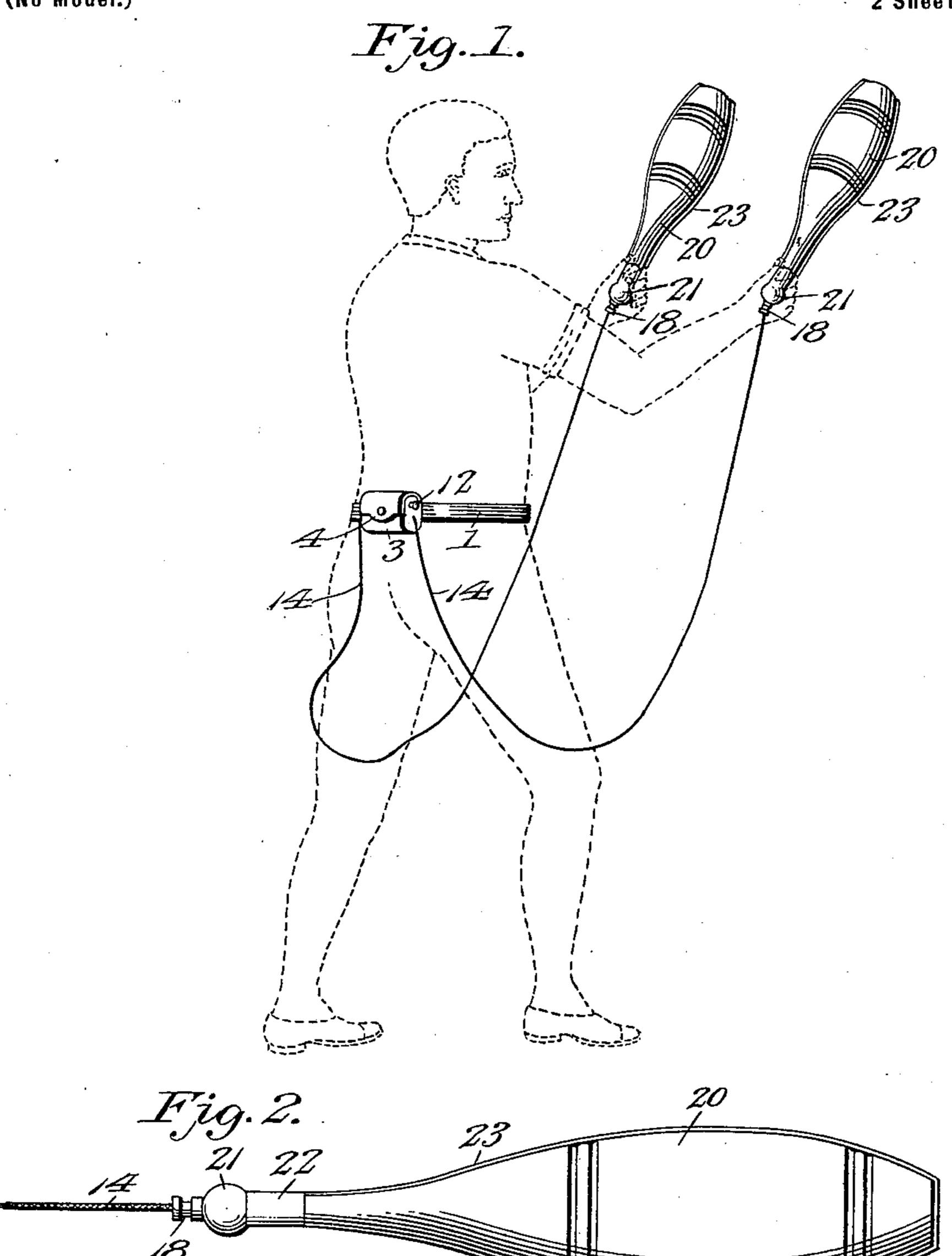
A. OLSON.

ELECTRIC EXERCISING APPARATUS.

(Application filed Apr. 1, 1901.)

(No Model.)

2 Sheets—Sheet I.



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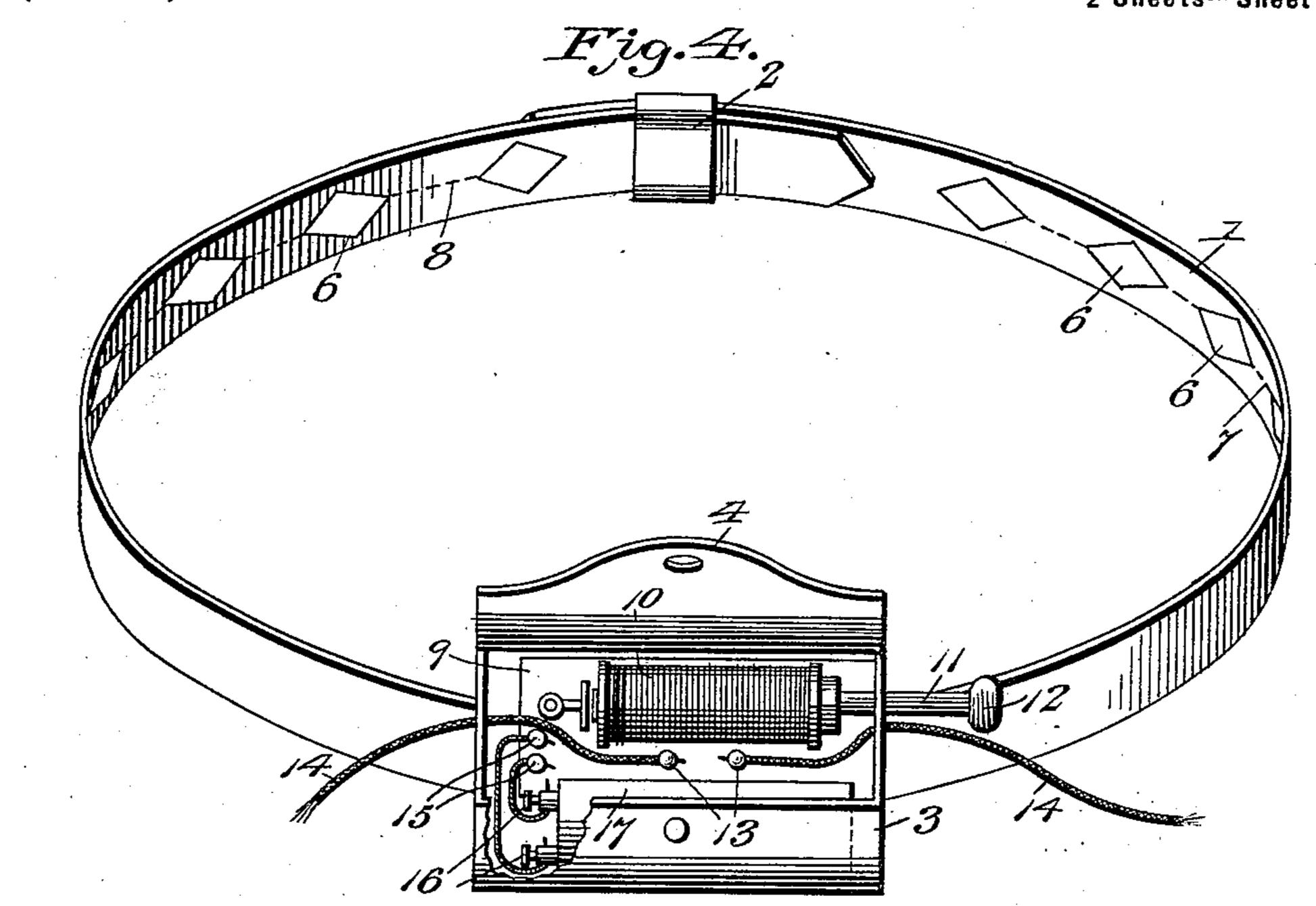
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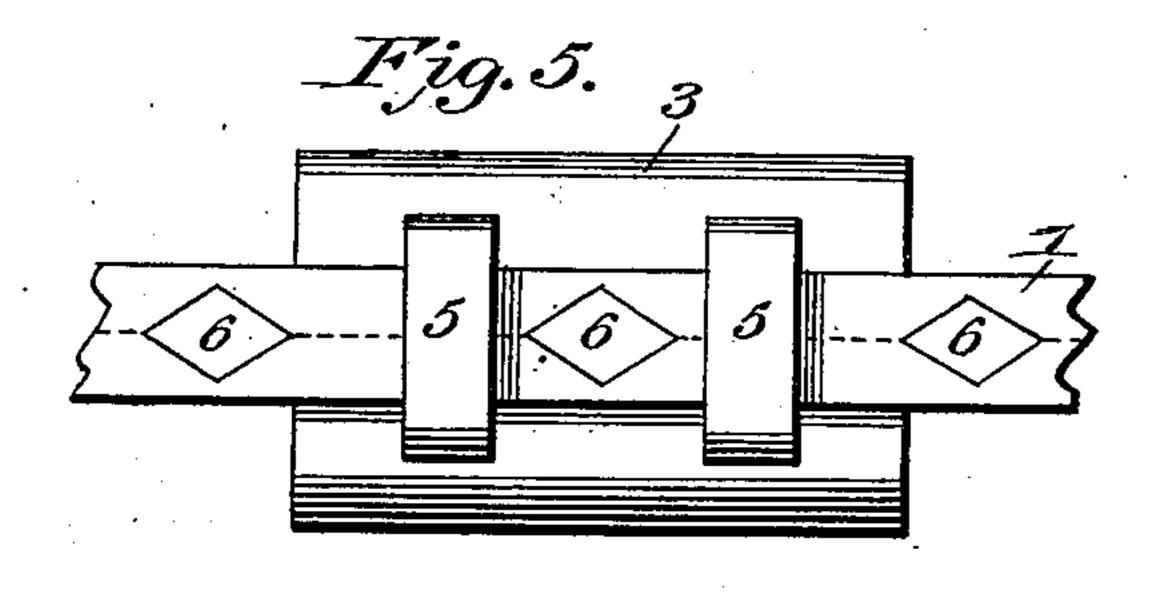
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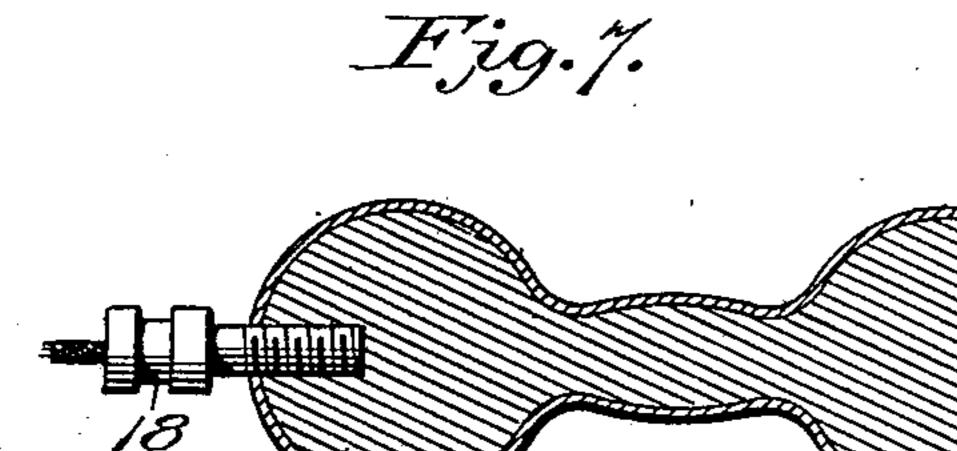
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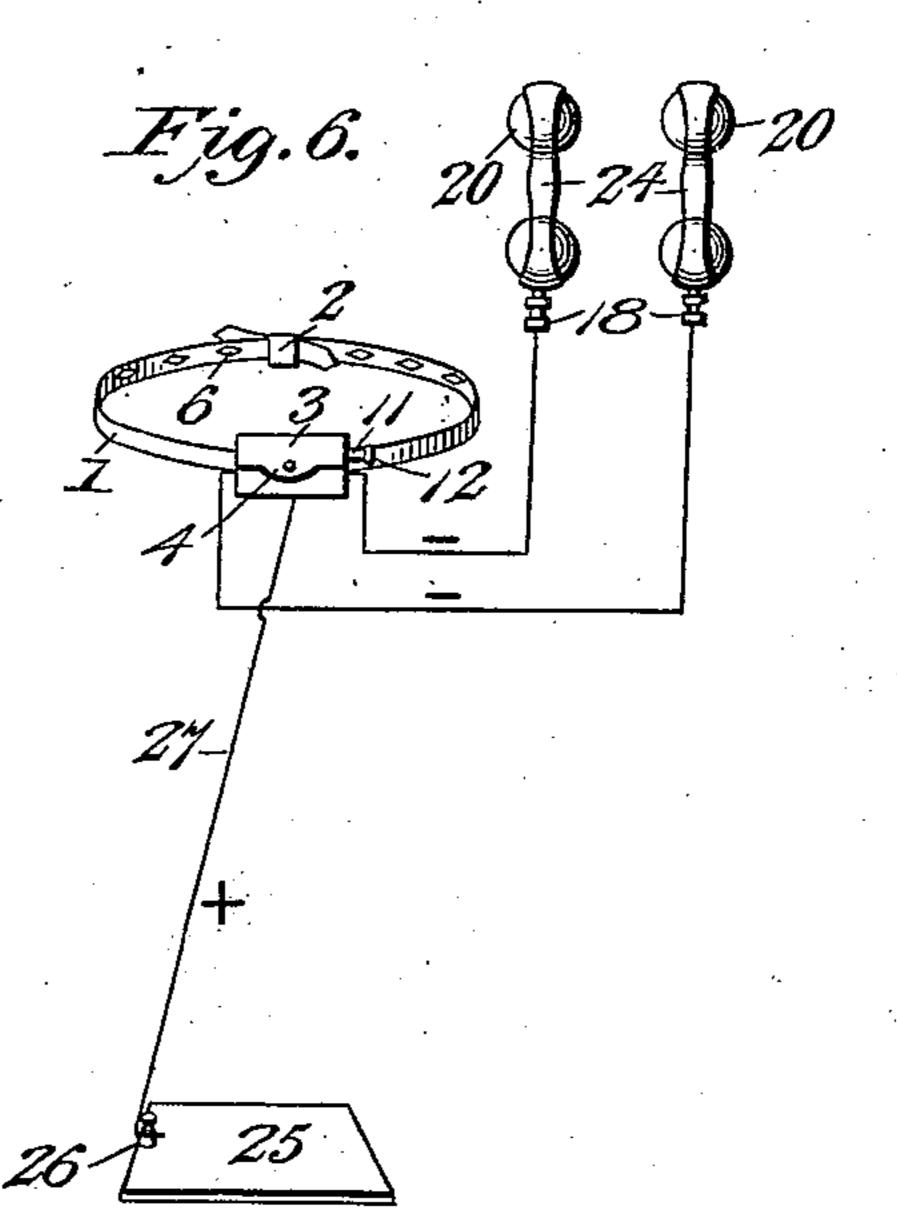
(No Model.)

2 Sheets-Sheet 2.









Alfred Olson

Witnesses

United States Patent Office.

ALFRED OLSON, OF SAN DIEGO, CALIFORNIA.

ELECTRIC EXERCISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 689,406, dated December 24, 1901.

Application filed April 1,1901. Serial No. 53,902. (No model.)

To all whom it may concern:

Beit known that I, ALFRED OLSON, a citizen of the United States, residing at San Diego, in the county of San Diego and State of Cali-5 fornia, have invented new and useful Improvements in Electric Exercising Apparatus, of which the following is a specification.

This invention relates to an electrical exercising apparatus; and the primary object of to the invention is to provide, in connection with manually-operated exercising devices, an electric generator, together with means whereby the generator may be carried upon the person and connected with the exercising devices, so 15 that a current of electricity will be transmitted through portions of the body while the person is exercising with the manually-operated devices, which devices may be in the form of dumb-bells or Indian clubs and the like.

The detailed objects and advantages of the invention will be fully pointed out in the

course of the ensuing description.

The invention consists in an electrical exercising apparatus embodying certain novel 25 features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and in-

corporated in the claims.

In the accompanying drawings, Figure 1 is 30 a perspective view showing the apparatus applied to a person whose body is represented in dotted lines. Fig. 2 is a plan view of an Indian club equipped with a portion of the apparatus. Fig. 3 is a detail section through 35 the handle portion of the Indian club shown in Fig. 2. Fig. 4 is a perspective view of the belt, showing the electrical generator and the case therefor mounted on the belt. Fig. 5 is a rear view of the carrying-case, showing the 40 means for attaching it to the belt. Fig. 6 is a reduced perspective view showing the employment of a foot-plate in connection with the belt and exercising devices. Fig. 7 is a sectional view of a dumb-bell, showing the 45 hand-grip and an electrical conductor associated with the dumb-bell.

Similar numerals of reference designate corresponding parts in all the figures of the draw-

ings.

In carrying out the present invention I employ a belt 1, provided with a suitable fastening device 2, adapting the belt to be fastened!

around the waist of the person using the exercising apparatus. The belt 1 forms a support for a carrying-case 3, which may be of 55 leather or any suitable material, provided with a flap 4, by means of which the case may be opened to give access to the electrical generator placed therein, the carrying-case 3 being provided with loops or keepers 5, through 60 which the belt passes. The belt has applied to its inner surface a plurality of contactplates 6, connected in two series by wires 7 and 8, which wires connect with the generator arranged in the carrying-case 3.

The generator comprises a base 9, upon which is mounted an induction-coil 10, provided with a movable core 11, by means of which the strength of the current of electricity may be varied to suit requirements, and said 70 core is arranged to slide through an opening in the side wall of the carrying-case, where it is provided with an exteriorly-arranged operating-knob 12, by means of which the core may be adjusted. The base 9 is also pro- 75 vided with binding-posts 13 to receive the ends of a pair of electrical conductors 14 in the form of insulated wires, and the base is further provided with other binding-posts 15, to which are connected the wires 16, attached 80 to a battery 17, also arranged within the carrying-case, as shown in Fig. 4. The electrical conductors or wires 14 are made of any desired length and are provided at their extremities with threaded couplings 18, the 85 shanks 19 of which are screwed into a set of dumb-bells 20 or Indian clubs 21.

By reference to Figs. 2 and 3 it will be seen that the hand-grip of the Indian club is made separate from the body of the club itself, the 90 body of the club being generally of wood and the hand grip or knob 21 being of metal and provided with an internally-threaded sleeve 22, which screws upon the handle portion of the Indian club, as shown in Fig. 3. The 95 metal contact-strip 23 extends longitudinally of the club and entirely around the same, as shown in Fig. 2, and connects at its opposite ends to the sleeve 22, so that the entire metal strip or band 23 is electrically connected with 100 the hand-grip arranged in the electrical circuit. The dumb-bell 20 is also usually formed of wood and is provided with a contact strip or band 24, which extends longitudinally

thereof and entirely around the same and is provided at one end of the dumb-bell with an opening, through which the threaded coupling 18 screws, as shown in Fig. 7. In case of both the Indian clubs and dumb-bells it will be seen that the hand-grip is formed partially or wholly of metal, which is located in the electrical circuit, with the generator placed within the carrying-case on the belt. The wires 14 are made of sufficient length, so that they will permit the free use and swinging of

they will permit the free use and swinging of the Indian clubs and dumb-bells, and as the said exercising devices are located in the electrical circuit it will be seen that during the operation of exercising a current of electricity of any desired strength is caused to pass through a portion of the body of the per-

pass through a portion of the body of the person so exercising. Under the arrangement shown in Fig. 1 the current will pass through the upper portion of the body of the user and also through the arms and hands.

In Fig. 6 I have shown the adaptation of a supplemental foot-plate 25, upon which the person may stand while operating the exercising devices. This foot-plate will be composed partly or wholly of metal and is provided with a binding-post 26 to receive a wire or conductor 27, which may be connected with one of the binding-posts of the generator.

30 For example, the wire 27 may be connected with the positive binding-post, while the other wires 14 may be connected with the negative binding-post. In this way the current will pass almost entirely through the body, arms,

From the foregoing description it will be seen that I have produced a convenient exercising apparatus, by means of which Indian clubs and dumb-bells and the like may be

freely handled in the usual manner by the operator, while at the same time a current of electricity of any desired strength may be caused to pass through different portions of the body. The application of electricity to the body and muscles of the operator while he exercises with the manually-operated devices will be found of great advantage in that the electric current acts on the muscles while in motion, and thus tends to compensate for the weariness produced by the vigorous han-

I do not desire to be limited to the exact details of construction and arrangement hereinabove set forth, but reserve the right to

55 change, modify, or vary the construction within the scope of this invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with manually-operated 60 exercising devices having metallic hand-grips; of an apparel-belt forming a support for an electric generator and having contact-plates on its inner surface; and flexible electric conductors connecting the generator and exer- 65 cising devices.

2. The combination with manually-operated exercising devices having metallic hand-grips; of an apparel-belt forming a support for an electric generator and having contact-plates 70 on its inner surface; a carrying-case supported by the belt and containing the generator; and flexible electric conductors connecting the

3. The combination with manually-operated 75 exercising devices having metallic hand-grips; of an apparel-belt having contact-plates on its inner surface; an electric generator supported by the belt; and flexible electric conductors provided with terminal threaded coup-80 lings adapted to be secured into the exercising devices.

generator and exercising devices.

4. The combination with manually-operated exercising devices having metallic hand-grips; of an electric generator; an apparel-belt hav- 85 ing contact-plates on its inner surface, and forming a support for the generator; electrical conductors extending from the generator to the exercising devices; and a foot-plate electrically connected with the generator.

5. The combination with manually-operated exercising devices having metallic hand-grips; of an apparel-belt having contact-plates on its inner surface; an electric generator carried by the belt and electrically connected 95 with the said plates; and electrical conductors extending from the generator to the exercising devices.

6. The combination with manually-operated exercising devices having metallic hand-grips; 100 of an apparel-belt having contact-plates on its inner surface; a carrying-case mounted thereon; and an electrical conductor mounted therein and electrically connected with the exercising devices, said generator comprising 105 a battery, induction-coil, and an adjustable core for said coil, the said core being adjustable through an opening in the carrying-case.

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

ALFRED OLSON.

Witnesses:

JOEL ANDERSON, GEO. W. DE LANO.