No. 781,683. PATENTED FEB. 7, 1905.

G. H. SHEPHERD.

COMBINED APPARATUS FOR EXERCISING AND MASSAGING BY FRICTION.

APPLICATION FILED SEPT. 30, 1904.

Fig. 1

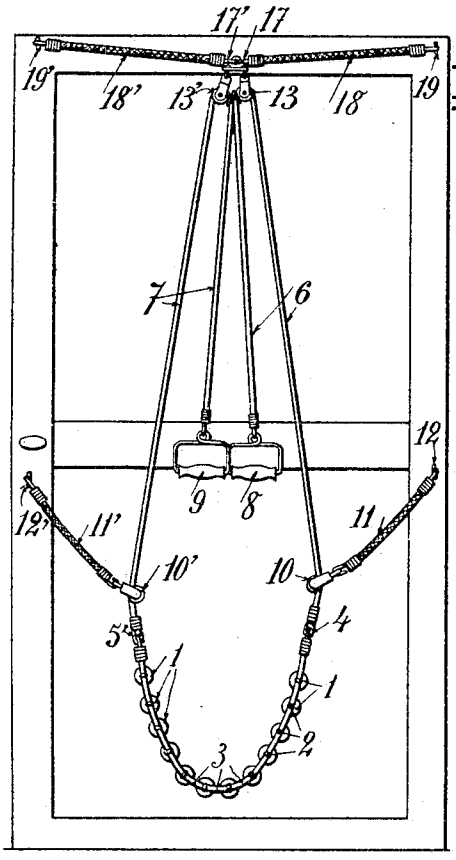



Fig. 6

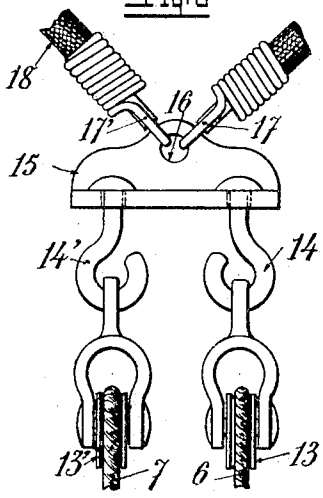



Fig. 2

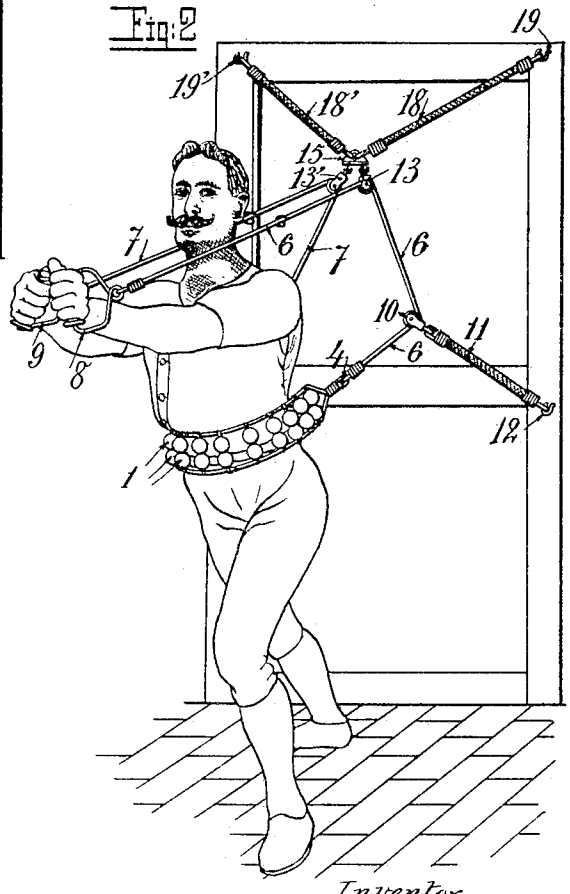



Fig. 3

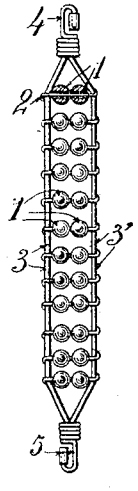
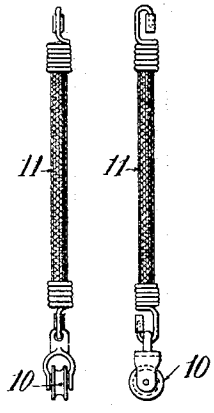



Fig. 4 Fig. 5




Witnesses
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PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 781,683. Patented February 7, 1905.

# UNITED STATES PATENT OFFICE.

GEORGE HENRY SHEPHERD, OF PARIS, FRANCE.

## COMBINED APPARATUS FOR EXERCISING AND MASSAGING BY FRICTION.

SPECIFICATION forming part of Letters Patent No. 781,683, dated February 7, 1905.

Application filed September 30, 1904. Serial No. 226,660.

*To all whom it may concern:*

Be it known that I, GEORGE HENRY SHEPHERD, a subject of the King of Great Britain, residing at No. 1 Rue Caumartin, Paris, in the department of Seine, France, have invented a new and useful Combined Apparatus for Exercising and Massaging by Friction, of which the following is a specification.

This invention relates to an exercising apparatus designed for massaging by friction a determined part of the body of the gymnast using the apparatus.

The apparatus consists in principle of a non-extensible cable terminating in two handles and carrying in the middle a massaging member. The cable, which is free to move over pulleys, is worked by the gymnast in such a way that the alternative movements of the arms draw the cable alternately in one direction and the other over the pulleys. The pulley-blocks are connected to the free ends of extensible cables, forming elastic springs fixed at the other end to a wall or door. The massaging device works over the point of application on the body of the gymnast, and as it is drawn alternately from side to side by each movement of the cable it works with a rolling friction over the gymnast's body.

In the accompanying drawings, Figure 1 represents an apparatus according to this invention attached on a door. Fig. 2 represents the manner of working the apparatus shown in Fig. 1. Fig. 3 is a detail view of the massaging device. Figs. 4 and 5 are detail views taken at right angles to one another, showing the extensible tensioning or spring devices connected to the pulleys. Fig. 6 shows the manner in which the upper pulleys are connected and mounted.

The apparatus shown in Fig. 1 comprises a massaging device consisting of balls 1, arranged two by two on axes 2, which may be formed of iron wire fixed by gripping over between two longitudinal cords 3 3'. The cords 3 3' are united at their extremities and provided with hooks 4 5 to receive, respectively, the working cables 6 7, which latter are terminated at their other ends by handles 8 9. The cables 6 7 are formed of an inextensible material—for example, of hemp, silk, or the like.

The cable 6 is passed successively first over the pulley 10 of a tensioning-cord 11, made from extensible material, (india-rubber, a spring, or the like,) carried by a screw-ring 12, fixed to the right-hand upright of a door, for example, and then over a pulley 13, arranged above the gymnast at the top of the door, for example. The cable 7 is arranged symmetrically with regard to cable 6. It passes first over the pulley 10' of a tensioning-cord 11', made from an extensible material carried by a screw-ring 12', fixed on the left upright of the door, and then said cable 7 is passed over a pulley 13', placed next to the pulley 13. The pulleys 13 13' are carried by hooks 14 14', fixed on a single plate 15, provided with an eye 16 for suspension on hooks 17 17' of two tensioning-cords 18 18', made of extensible material similar to the tensioning-cords 11 11'. The cords 18 18' are hooked at their other extremities to two screw-rings 19 19', fixed at one side and the other at the top of the door.

In order to use the apparatus, the gymnast applies the massaging device 1 to the part of his body which he desires to massage, (the chest, waist, &c.,) as in Fig. 2. Then he seizes the two handles 8 and 9, one in each hand, and draws the cables alternately backward and forward or upward and downward. The inextensible cables 6 7 work, respectively, over the pulleys 10 13 and 10' 13', and the balls 1 of the massaging device work with a rolling friction over the gymnast's body.

By the formation of the tensioning-cords 11 11' 18 18' from extensible material it is made possible for the energy of the massaging and the friction to be easily controlled according to the will of the gymnast during the exercising. It is sufficient for him to apply his body more or less strongly against the massaging device 1.

The balls 1 of the massaging device may be formed of wood, ivory, &c. They may have the shape of an olive or a cylinder, or, in fact, any other desired form.

What I claim is—

1. An apparatus for simultaneous exercising and massaging by friction comprising a massaging device, two cables connected to opposite ends of said massaging device, a han-

dle attached to each of said cables, guiding means for the cables, and extensible springy supports for the guiding means.

2. An apparatus for simultaneous exercising and massaging by friction comprising a flexible frame and a plurality of massaging-balls revolubly supported therein, two cables each attached to one of the ends of the flexible frame, a handle on the outer end of each cable, a plurality of pulleys adapted to guide said cables, and springy supporting means for said pulleys.

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

GEORGE HENRY SHEPHERD.

Witnesses:
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A. R. BAKER.