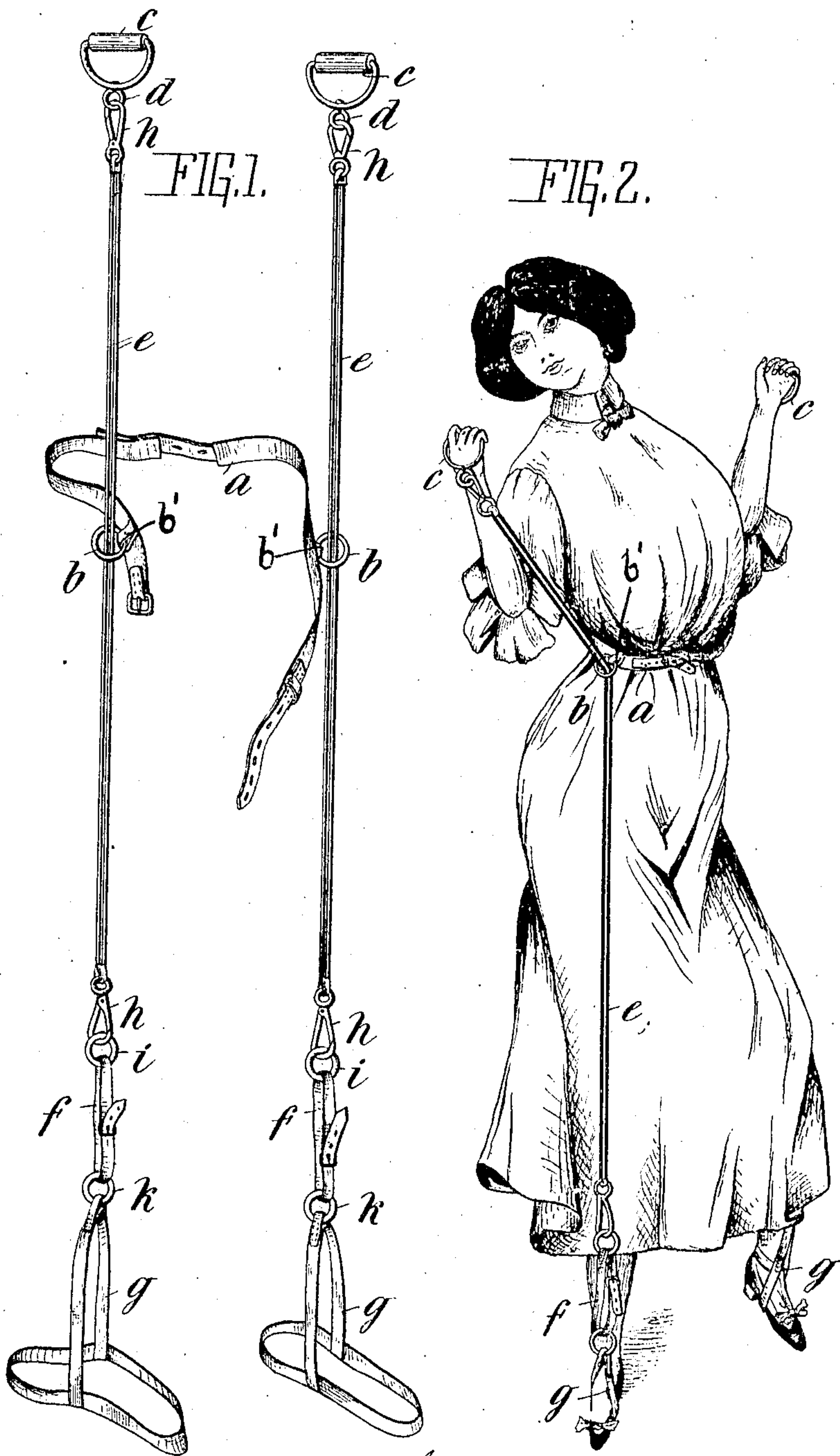


No. 843,478.

PATENTED FEB. 5, 1907.

G. MÜLLER.
PHYSICAL EXERCISER.
APPLICATION FILED JAN. 6, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORG MÜLLER, OF BERLIN, GERMANY, ASSIGNOR TO THE FIRM KOLBERGER ANSTALTEN FÜR EXTERIKULTUR WILHELM ANHALT GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, OF KOLBERG, PRUSSIA, GERMANY.

PHYSICAL EXERCISER.

No. 843,478.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed January 6, 1905. Serial No. 239,929.

To all whom it may concern:

Be it known that I, GEORG MÜLLER, a subject of the German Emperor, residing at 28 Potsdamerstrasse, Berlin, Germany, have invented certain new and useful Improvements in Physical Exercisers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Physical exercisers are already known in which elastic connections which run through a piece buckled round the shoulder are connected at one end with stirrups and at the other end with handles, the elastic cords, if so desired, being also connected with a cap worn by the person exercising. In order to enable this to be done, the elastic cord between the foot and the hand must be so long that if the cap be omitted it offers no appreciable resistance. Moreover, this may cause an injurious pressure on the chest and the lungs. Again, with such apparatus all kinds of exercises cannot be performed. Exercises in knee-bending in the lunging-out position or in a sitting posture are impossible, there being no resistance. Likewise, no resistance is presented in raising the legs forward, backward, or sidewise, as in all these exercises the strength of the elastic strand is diminished, as when such exercises are performed the ends of the strand are brought nearer together, the strands being adjusted in their shortest line of connection. Finally, it is also impossible to compensate the gradual lengthening of the strand which occurs when the exerciser is used or to increase the work correspondingly to the strengthening of the muscles without introducing fresh strands. All these disadvantages are obviated by means of this invention, which is suitable for all free gymnastic exercises and does not interfere with, but even assists, the breathing. According to the present invention a belt is put round the loins. The belt is provided with guides for the elastic strands connecting the handles and the stirrups. In addition an adjustable buckling strap is provided by means of which the lengthening of the strands

in the course of use can be compensated. An increase in the work corresponding to the strengthening of the muscles can be effected very easily with the apparatus.

Figure 1 represents the apparatus before use, and Fig. 2 the same in use.

On a belt *a*, which can be narrowed or widened in front and at the back, so as to serve for different persons, rings *b* are provided, through which elastic bands or cords *e* are passed. The upper ends of these elastic bands *e* carry snap-hooks *h*, which are suspended in swivels *d*, fixed to the handles *c*, so that the handle can freely move. The lower ends of the elastic cords *e* are likewise provided with snap-hooks *h*, which engage in rings *i* on the buckle-straps *f*, to which the stirrups *g* are attached by means of rings *k*. The buckle-straps *f* can be lengthened or shortened.

A considerable advantage in the described apparatus is that the gymnast may put it on and allow the cords to hang from the belt while he is performing other work.

The person using the exerciser can increase at will the resistance to be overcome by tightening the buckling piece *f*, as well as by inserting further elastic strands adjoining each other in the known manner. The snap-hooks greatly facilitate the insertion of such strands *e*.

What I claim, and desire to secure by Letters Patent, is—

1. An exercising apparatus comprising elastic bands or cords, each provided at one end with a handle and at the other end with a foot attachment or stirrup, and a waist-belt adjustable at the front and back and provided with guide-rings for the elastic bands fixed on opposite sides of its front ends.

2. An exercising apparatus consisting of elastic bands, each provided at one end with a handle and at the other end with a foot attachment or stirrup, a waist-belt provided with means for taking in and letting out the same at the front and back, loops fixed to opposite ends of said waist-belt near the front thereof, and guide-rings carried by said loops.

3. An exercising apparatus comprising

elastic bands, foot-stirrups, means for adjusting said bands to said stirrups, handles upon the upper ends of said elastic bands, and a waist-belt provided with fixed means
5 through which the elastic bands pass freely and adjusting means for said belt at the front and back thereof to provide for varying the size of the belt without changing the

position of the guide-rings relatively to the body of the user.

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

GEORG MÜLLER.

Witnesses:

WOLDEMAR HAUPT,
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