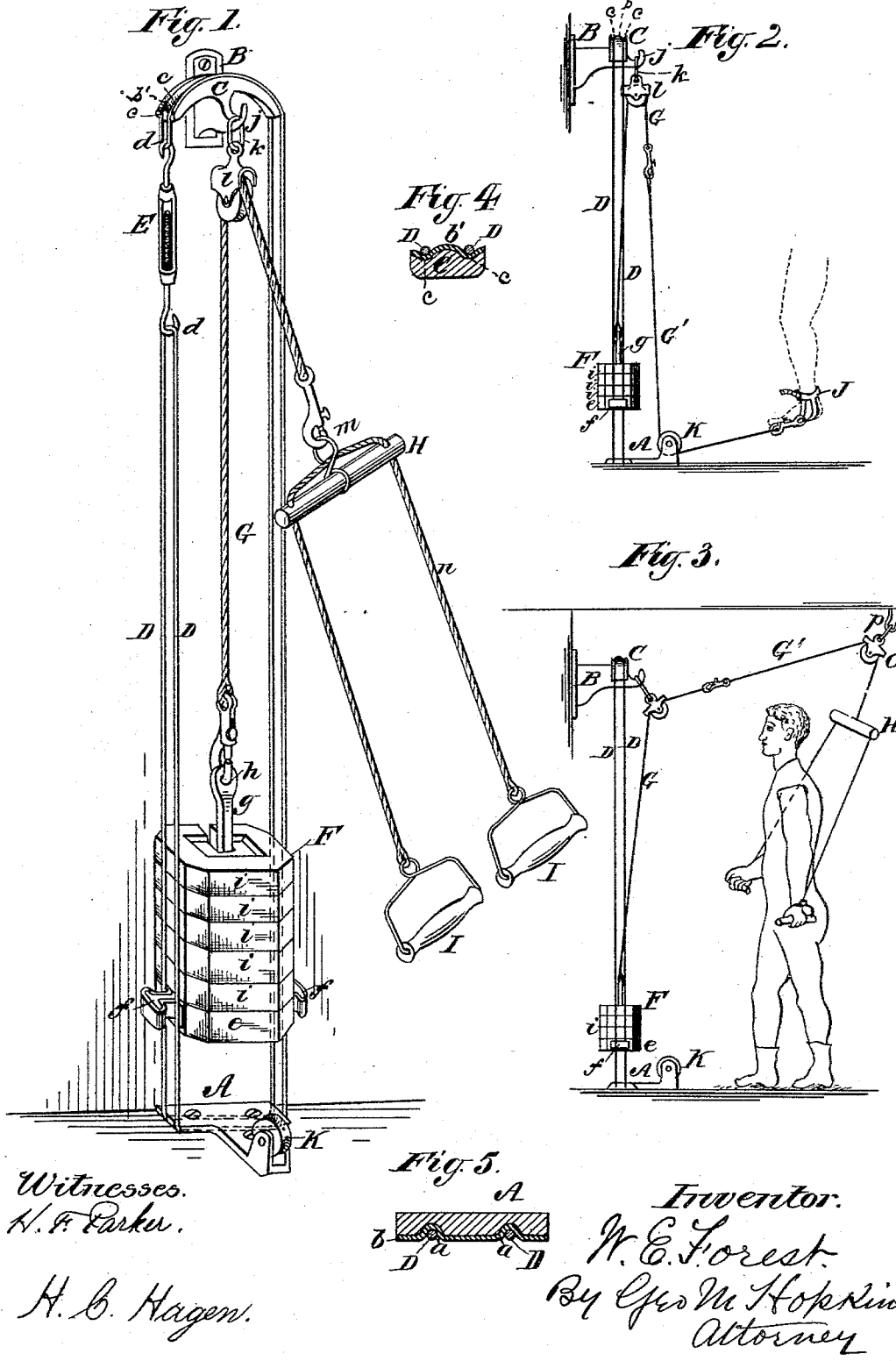


(No Model.)

W. E. FOREST.
EXERCISING MACHINE.

No. 325,404.

Patented Sept. 1, 1885.



UNITED STATES PATENT OFFICE.

WILLIAM E. FOREST, OF NEW YORK, N. Y.

EXERCISING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 325,404, dated September 1, 1885.

Application filed October 24, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. FOREST, of New York, in the county and State of New York, have invented a new and useful Improvement in Exercising-Machines, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a perspective view; Fig. 2, a side elevation showing the manner of using the foot-exercising attachment; Fig. 3, a side elevation showing the application of the ceiling-pulley; and Figs. 4 and 5 are transverse sections of the bracket and foot-plate, showing the leather facing.

My invention provides a simple and compact apparatus to be used in the office or dwelling for exercising the muscles, my object being to furnish means for taking gymnastic exercise in the place of business or at home without the necessity of repairing to a gymnasium.

My invention consists in a plate to be attached to the floor, and in a bracket to be attached to the wall, parallel wires extending over the bracket and under the floor-plate, and provided with tightening device, a sectional weight guided by the wires and provided with a rope extending over a pulley-swivel to the bracket and provided with suitable handles.

It also consists in linings of leather or analogous material applied to the bracket, floor-plate, and weight, to deaden the sound of the weights sliding between the wires.

It also consists in a combination, with the foot-plate, of a pulley for receiving an auxiliary rope for foot-exercise; also, in a combination, with the weight guiding and operating devices, of a ceiling-pulley for receiving the auxiliary rope for additional forms of exercise.

The floor-plate A is provided with transverse grooves *a*, and a leather lining, *b*, is secured to the floor by screws or otherwise, and a bracket, B, having a grooved saddle, C, is attached to the wall, and the grooves *c* of the saddle C are parallel and correspond with the two grooves *a* in the floor-plate A. The saddle C is provided with a leather lining, *b'*, which conforms to the grooves *c*. Two wires, D D, extend under the base-plate A, through

the grooves *a*, and upward over the saddle C of the bracket B in the grooves *c*, and the looped ends *d* of the wires receive an ordinary turn-buckle, E, which renders the wires D D taut. Arranged in this manner, the wires D D form two parallel guides extending from opposite sides of the floor-plate A upward to corresponding ends of the saddle C, and between these guides is placed a sectional weight, F, formed of the base-plate *e*, provided with leather-covered ears *f*, extending laterally on each side between the wires D D, and having a central vertical rod, *g*, with an eye, *h*, on the upper end thereof for receiving the rope G, also the detachable sections *i*, which are slotted to the center and adapted to receive the rod *g*. The lower section, E, of the weight F is provided with a recess for receiving a projection formed on the under surface of the adjacent removable section *i*, and the said removable section is provided with a recess in its upper surface for receiving a projection formed on the similar section, which it supports. The projection on the under surface of one weight entering into the recess in the weight below it retains the several sections of the weight in place.

The bracket B is provided with a hook, *j*, for receiving a link, *k*, by which a pulley, *l*, is swiveled or loosely suspended from the bracket, so that it may turn in any desired direction within the limits of the requirements of the machine. The rope G is provided at each end with snap-hooks of ordinary construction, for convenience in attaching it to the weight and to the handles, or to an auxiliary rope, in case it is desired to exercise the foot or to employ the ceiling-pulley. The rope G extends over the pulley *l*, and is connected with the link *m*, attached to the center of the cross-bar H. The cross-bar H is apertured at its ends and receives a rope, *n*, which passes through the link *m*, and has attached to its free ends the handles I.

When it is desired to modify the exercise by a direct pull from overhead, or at angles that would be impossible with the apparatus arranged as shown in Fig. 1, I provide a ceiling-pulley, *o*, and a hook, *p*, for supporting the same a suitable distance from the bracket B, and connect with the rope G an auxiliary

rope, G', which extends over the pulley *o* and is connected with the bar H, as in the case first described.

When the apparatus is employed for foot-exercise, I provide a foot-strap, J, and extend an auxiliary rope, G', under the pulley K, journaled in ears projecting from the base-plate A, and attach it to the end of the rope G, as shown in Fig. 2.

My improved exercising apparatus is used by grasping the handles I I in the hands and raising the sectional weight F and allowing it to fall gradually, the body being placed in various positions to bring all of the muscles into action. The weight F may be adapted to the wants of the user by increasing or diminishing it by applying or removing the sections *i*. The leather covering of the ears *f* and the leather lining of the saddle C and floor-plate A deaden the noise that otherwise might be communicated to the wall and floor by the wires, which are vibrated more or less by the movement of the weight.

The wires D D, being thin and flexible, permit of packing the entire apparatus in very small compass, so that it may be readily transported and conveniently put out of sight when not in use.

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

1. The combination, with the grooved floor-plate A and the bracket B, provided with a saddle, C, of parallel wires D D, looped at the ends, and a tightener, E, connected with the looped ends of the wires and adapted to render the wires taut, as herein specified.

2. The combination, with the grooved floor-plate A, provided with a leather lining, *b*, and the bracket B, provided with a grooved saddle, C, having a leather lining, *b'*, of parallel wires D D, looped at the ends, and a tightener, E, connected with the looped ends of the wires, as herein specified.

3. The combination, with guiding-wires D D, sectional weight F, rope G, swivel-pulley *l*, bracket B, and floor-plate A, of the ceiling-pulley *o* and auxiliary rope G', as herein specified.

WILLIAM E. FOREST.

Witnesses:

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H. C. HAGEN.