S. C. FOSTER.

EXERCISING-MACHINES.

No. 195,116. Patented Sept. 11, 1877.

Fig. 1.

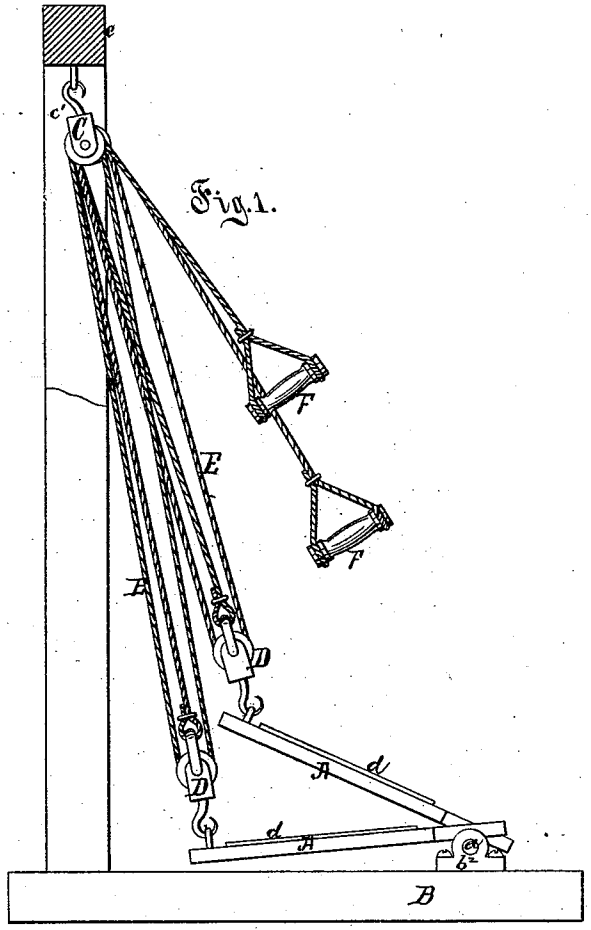


Fig. 2.

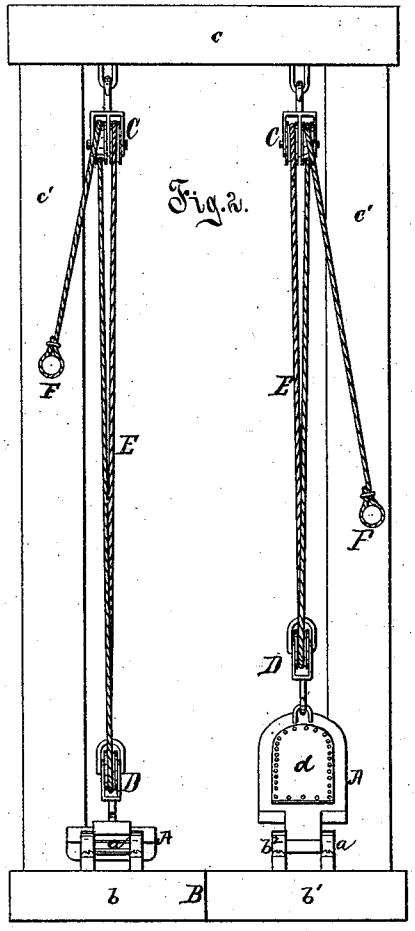
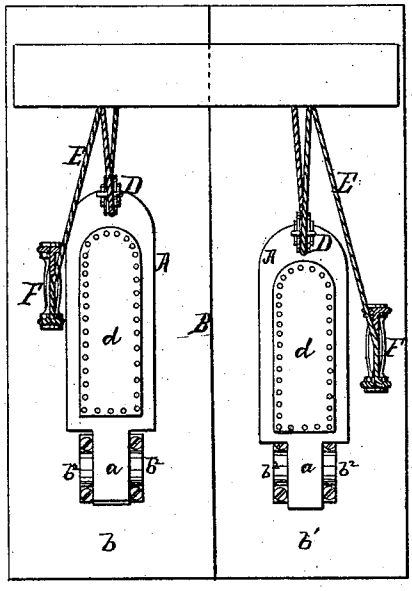


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN EXERCISING-MACHINES.

Specification forming part of Letters Patent No. **195,116**, dated September 11, 1877; application filed August 4, 1877.

To all whom it may concern:

Be it known that I, S. CONANT FOSTER, of the city, county, and State of New York, am the inventor of an Improved Apparatus for Muscular Exercise, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an apparatus for the production during its operation of healthful muscular exercise; and it consists in the combination of parts hereinafter set forth, arranged as specified, and more particularly recited in the claim.

Figure 1 is a side elevation of an apparatus embodying my invention. Fig. 2 is a plan of the same, and Fig. 3 is an end elevation of the same.

A A are two treadles. These may be made either of wood or metal. They are pivoted at *a*, and, in order that they may be conveniently handled and arranged, they may be mounted on a standard or base, B. This standard may, for convenience in packing or carrying the apparatus, be made in sections b b^1, each having a treadle pivoted to it by lugs b^2, as shown.

The standard may be dispensed with and the treadles mounted or pivoted directly on the floor.

In a cross piece or beam above the treadles I fix, by means of suitable staples and hooks, the blocks C C, one over and in line with the free end of each treadle. These blocks may be hung to the room-ceiling or to a cross-piece, *c*, carried by uprights c' jointed to or set in the floor or the standard.

In the end of each treadle I fix a block, D, as shown. Each block D is now rigged to the block C immediately over it, as follows: A rope or line, E, is attached to the treadle or its block D at the free end thereof, and is passed upward to and through its block C, thence downward and through the block D, and thence upward and through the block C again; and to the free end of the rope or line is adjustably attached a hand-piece, F.

Any other mode of rigging the rope E may be employed which will secure the raising of the treadle when the hand-piece is pulled downward, and the reverse when the hand-piece is forced upward; but I prefer the rigging shown in the drawing as being the most effective and satisfactory.

The treadles may be made double, if desired, the lugs in which they are pivoted being sufficiently elevated to permit the double treadle to swing free of the standard or floor. The double treadles being rigged, as hereinbefore described, two persons may exercise with the apparatus simultaneously.

The upper faces of the treadles are preferably given a facing or covering of rubber, *d*, or some similar material, to prevent the slipping of the user's foot from the treadle.

The operation of the apparatus is obvious. The user steps upon the treadles, placing one foot upon each, and grasps the hand-pieces, one in each hand. Muscular exercise may now be secured to all the muscles of the legs, trunk, and arms by alternately pulling downward on the hand-pieces; or the hand-pieces may be pulled simultaneously, and, the legs being kept straight, the muscles of the arms and chest alone are exercised; or the user, standing on the treadles, may have them alternately raised and lowered by an assistant holding the hand-pieces, when the legs alone are exercised.

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

In combination, as an apparatus for producing muscular exercise, the treadles A, blocks C and D, and the rope E, all arranged as specified, to operate as set forth.

S. CONANT FOSTER.

Witnesses:

A. S. FITCH,

M. F. CLIFTON.