

A. M. ALLEN.
Exercising-Machine.

No. 160,863.

Patented March 16, 1875.

Fig 1.

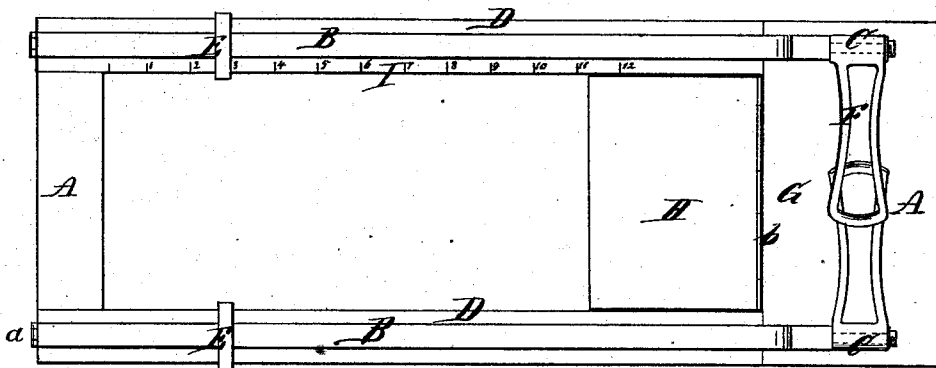
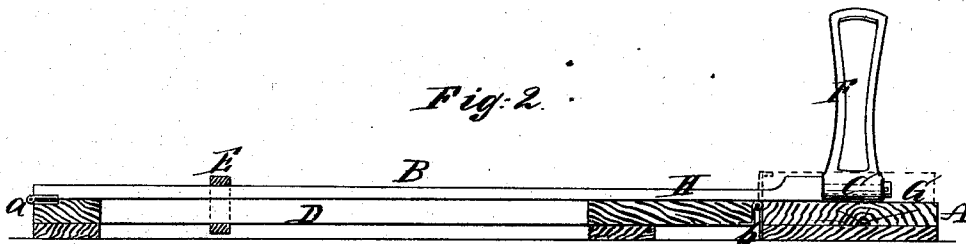


Fig: 2.



Witnesses:
Chas. Hahlers.
Ernst Bilheler.

Inventor:
Arthur M. Allen
per
Van Santvoord & Hauff
Attors

UNITED STATES PATENT OFFICE.

ARTHUR M. ALLEN, OF NEW YORK, N. Y., ASSIGNOR TO MARY S. ALLEN,
OF SAME PLACE.

IMPROVEMENT IN EXERCISING-MACHINES.

Specification forming part of Letters Patent No. **160,863**, dated March 16, 1875; application filed
January 29, 1875.

To all whom it may concern:

Be it known that I, ARTHUR M. ALLEN, of the city, county, and State of New York, have invented a certain new and Improved Exercising Apparatus, of which the following is a specification:

This invention is illustrated in the accompanying drawing, in which Figure 1 represents a plan view. Fig. 2 is a longitudinal section.

Similar letters indicate corresponding parts.

My invention consists in an apparatus constructed of a frame and of a spring bar or bars, with which are combined adjustable slides for regulating the tension of the bars and handles, by which the bars are lifted in the operation of exercising. With the frame is combined one or more hinged boards, by which the step of the frame can be raised at the option of the exerciser, and whereby my apparatus is adapted for persons of different stature.

In the drawing, the letters A D designate the frame of my apparatus, to which are affixed the spring-bars B B. These bars B B are affixed to the frame by means of a hinge-joint, *a*, and in the present example are two in number, being situated and supported on the longitudinal sides D of the frame. The longitudinal sides of the frame are made in the form of sills D D, which, together with the bars B B, can be embraced by slides E, which serve to hold the bars to the frame. The slides E are made of india-rubber, or otherwise made elastic, so as to constitute a spring to the bars B B, whereby the latter yield to a lifting of their free ends, while they have a tendency to recover their horizontal position. Instead of this latter arrangement the slides E may be made rigid and the bars made elastic, with a like result. To the free end of the bars B B, respectively, are connected handles F, by grasping which the bars can be lifted against the action of their springs for the purpose of exercising. The extent to which the bars B B are or can be lifted is determined by the position of the slides E, and is gaged by a scale, I, marked on the face of

one or both the sills D D. The handles F are connected to the bars B B by means of a pivot-joint, C, so that they can be elevated, and being made flaring at their pivoted ends they have a tendency to remain in an elevated position.

It is obvious that the handles can be folded down on the platform of the frame, and by this means large space is gained in packing the apparatus for transportation. The length of the handles F is such as to adapt the apparatus to persons of medium height, but to accommodate persons of small stature the step or platform G of the frame should be raised or heightened. To this end I affix to the frame, by means of a hinge-joint, *b*, and immediately next the said step G, a board, H, which, when out of use, occupies the space between the sills D D, and which can be swung over or upon the platform G in order to increase its height, or can be removed therefrom at pleasure.

In the present example a single board, H, is used, but additional boards may be connected to this one if seen fit, the additional boards being hinged at alternate edges, so that they can be folded on each other and on the step.

By this arrangement I obtain a very simple and effective apparatus, and one which can be gotten up at little cost.

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

1. In an exercising-machine, the combination of the frame A, spring bar or bars B B, slides E, and handles F, arranged and adapted to operate substantially as described.

2. The combination of the frame A D, spring-bars B B, slides E, handles F, and board or boards H, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of January, 1874.

ARTHUR M. ALLEN.

Witnesses:

W. HAUFF,
CHAS. WAHLERS.