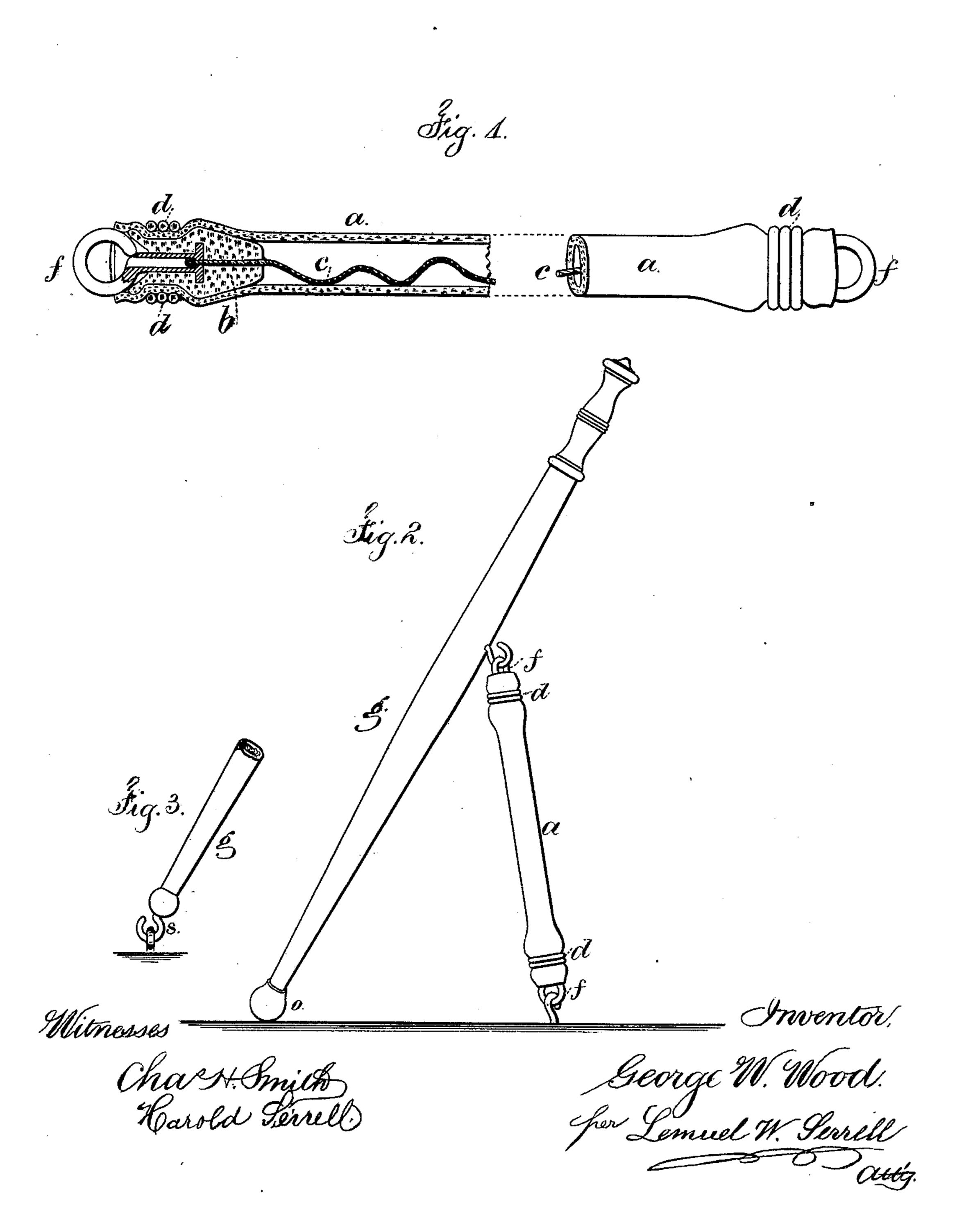
## G. W. WOOD.

## EXERCISING MACHINE.

No. 189,539.

Patented April 10, 1877.



## UNITED STATES PATENT OFFICE.

GEORGE W. WOOD, OF NEW YORK, N. Y., ASSIGNOR TO MARK M. STANFIELD AND HETTY W. WOOD, OF SAME PLACE.

## IMPROVEMENT IN EXERCISING-MACHINES.

Specification forming part of Letters Patent No. 189.539, dated April 10, 1877; application filed March 24, 1877.

To all whom it may concern:

Be it known that I, George W. Wood, of the city and State of New York, have invented an Improvement in Exercising Apparatus, of which the following is a specification:

This invention is an improvement upon the apparatus patented to me June 1, 1875.

I make use of plugs at the ends of the rubber tube, having necks in them, into which necks the rubber tube is confined by elastic bands, so as to insure a firm attachment of the tube to the plugs. The plugs are preferably of india-rubber, and their inner ends tapering and rounded, so as to prevent the tube being bent at a sharp angle across the hands when the tube is pulled at an angle to the end portion that is held in the hands, thus preventing undue strain and injury to the tube. The limiting-cord is used as in aforesaid patent, and at the ends of the plugs are eyes, by means of which the elastic tubes can be connected to stationary hooks, and handles or levers can be used with said tubes in exercising, so as to swing by such tubes or move the body in imitation of rowing, driving, &c.

In the drawing, Figure 1 is a section and elevation of the ends of the improved tube; and Fig. 2 is a perspective view of the same, and the lever-bar employed therewith for varying the leverage and exercising in imitation

of rowing, &c.

The india-rubber tube a is provided with the two plugs b, one at each end, to which the limiting-cord c is connected. These plugs are preferably of rubber, and made with tapering bodies, extending into the tube sufficiently to be bent by the pull on the tube when passing off at an angle to the plug, and thereby lessening risk of injury to the tube. Each plug has a neck in it, and there are india-rubber or elastic bands d around the outside of the tube a, to press said tube into the neck and confine the same firmly; but said elastic bands will yield sufficiently with the tube when under strain to lessen risk of injury to the tube a.

An eye or hook, f, is attached to each plug, and projects from the end thereof. This allows the exercising-tube to be hooked at one end to an eye or staple, and at the other end to a handle or lever, so that the tube will be stretched uniformly, and without any angles or bends, such as occur when the tube is stretched by grasping the end with the hand.

The lever g is made with a hook or staple near the middle thereof, to receive the hook or eye at one end of the tube a, and this bar can be grasped with both hands; and the exercise results from stretching the tube a, the other end of such tube being hooked to the wall or the floor.

When hooked to the wall, and the lever g applied in a horizontal position, with one end resting upon the wall, a movement similar to that in rowing can be made with the body.

The end of this lever g can be armed with an india-rubber cap, o, to prevent injury to, or slipping upon, the wall; or an eye or staple, s, may be employed at the end of said lever, to hook into an eye or staple secured to the floor or wall, as illustrated in Fig. 3.

I claim as my invention—

1. In combination with the elastic exercising-tube a, the plugs b, having necks, and the elastic bands d, confining the tube into said necks, substantially as set forth.

2. The combination, with the elastic exercising-tube and the end plugs thereof, of the hooks or eyes f, attached to said plugs, sub-

stantially as set forth.

3. In the exercising apparatus, the combination, with the elastic exercising-tube and connecting eyes or staples, of the lever g, substantially as set forth.

Signed by me this 20th day of March, A. D.

GEORGE W. WOOD.

Witnesses:

GEO. T. PINCKNEY, CHAS. H. SMITH.