S. M. BARNETT. Exercising-Devices.

No. 196,324.

Patented Oct. 23, 1877.

Fig. 1.



Fig.2.



Fig.3.



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UNITED STATES PATENT OFFICE.

· SAMUEL M. BARNETT, OF NEW YORK, N. Y.

IMPROVEMENT IN EXERCISING DEVICES.

Specification forming part of Letters Patent No. 196,324, dated October 23, 1877; application filed May 22, 1877.

To all whom it may concern:

Be it known that I, SAMUEL M. BARNETT, of the city, county, and State of New York, have invented certain Improvements in Parlor-Gymnasiums, of which the following is a

specification:

This invention relates to the class of devices termed "parlor-gymnasiums," and which comprise, as their essential features, an elastic band provided with handles at its opposite ends, in such manner that, the handles being grasped, the alternate stretching and relaxing of the elastic band in various positions of the arms and body of the person using the same affords a healthful and strengthening exercise.

The invention comprises the combination, in a device of the class specified, of a woven or braided sheath, in combination with an india-rubber core and the handles, whereby provision is made not only for the protection of the surface of the rubber from the injurious action of the atmosphere, and of perspiration, oils, and other substances likely to injure the same, but whereby, also, the extension of the core beyond proper limits is pre-

vented.

The invention further comprises a novel combination of peculiarly-formed knots upon the ends of the elastic core with tapering bores and sealing-plugs formed in the handles, whereby provision is made for the convenient and secure attachment of the ends of the said elastic core to the said handles.

The invention further comprises a novel combination of a loop with the peculiarlyformed knots on the ends of the elastic core, the bores of the handle, and the sealing-plugs, whereby provision is made for the attachment of one end of the device to a hook or like fixed support in the use of the apparatus in some varieties of gymnastic exercise.

Figure 1 is a side view and partial section of a device made according to my invention. Fig. 2 is a similar view of the same, showing the parts in process of being put together. Fig. 3 is a transverse sectional view of the elastic core with its woven or braided sheath; | pose herein set forth.

and Fig. 4 is a similar view, showing a modified construction of the said core and sheath.

A is the elastic core, formed either of a number of strands of india rubber placed parallel, as represented in Fig. 3, or, when preferred, of an india-rubber tube, as represented in Fig. 4. B is the sheath, formed of cotton, linen yarn, or other textile material, woven, braided, or knit around the core A. C are the handles, formed with axial bores a, of tapering form, as represented in Figs. 1 and 2, these tapering bores a be-

ing largest at their outer ends.

In the attachment of the handles, the latter are slipped upon the core A with its covering B, as indicated in Fig. 2, and a peculiarly-formed knot, c, is formed upon each end of the core, by winding wire or cord around said end tightly and firmly until a bulb of sufficient size is provided thereon. During the operation of forming this knot, as aforesaid, the inner ends of a loop, D, are placed between the concentric coils of the wire or thread, and are thereby firmly and tightly bound upon the end of the core. This being done, the knot is dipped in glue, and then drawn inward into the tapering bores a of the handles until they are crowded fast in the said bores at their diminished diameter or inner portions. Here the glue hardens, and the inner ends of the bores being too small to permit the passage of the knots, the latter are effectually prevented from drawing through or out of the bores of the handles.

E are the sealing plugs, perforated centrally, as shown at d. These sealing-plugs are glued into the flaring outer ends of the bores a, and close the same, the loop D projecting through the orifice or perforation d of one of the handles, as shown in Fig. 1, the loop being thus firmly attached and held

in place.

What I claim as my invention is—

1. The combination of the woven, braided, or knit sheath B with the elastic core A in the handle C, substantially as and for the pur-

2. The combination of the knot c, formed as escribed, on the core A, in combination with the tapering bores B of the handles C, the nots being glued within the said bores, all abstantially as and for the purpose herein set forth.

SAMUEL M. BARNETT. 2. The combination of the knot c, formed as described, on the core A, in combination with the tapering bores B of the handles C, the knots being glued within the said bores, all substantially as and for the purpose herein set forth.

3. The combination of the loop E with peculiarly-formed knots c on the core A, the

Witnesses:

EDWARD HOLLY, H. Wells, Jr.