

Aug. 2, 1927.

1,638,003

B. NEUMANN

APPLIANCE FOR BODILY EXERCISE

Filed Aug. 14, 1926

Fig. 1

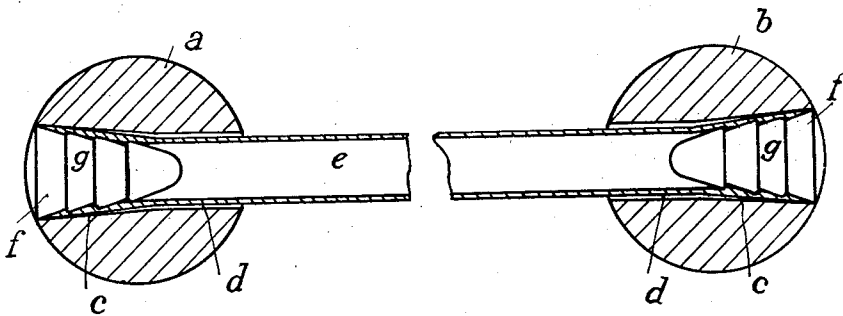
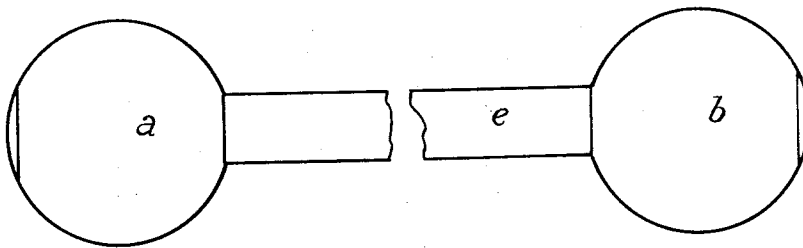


Fig. 2



Inventor:

B. Neumann

UNITED STATES PATENT OFFICE.

BRUNO NEUMANN, OF NUREMBERG, GERMANY.

APPLIANCE FOR BODILY EXERCISE.

Application filed August 14, 1926, Serial No. 129,219, and in Germany September 2, 1925.

This invention relates to exercising appliances and has for its object to provide an appliance for bodily exercises, made of a tubular rubber part acting as an extensible member, which is characterized by the combination of a single strand extensible member with ball-shaped handles at either end and having grooved wedge members for fixing the extensible member in the ball-shaped handles.

So-called chest expanders are known, the extensible member of which is characterized by helical steel springs having stirrup-like handles at either end. These exercising appliances, however, have various disadvantages which consist in this, that not only are they very expensive to manufacture, which makes their purchase by the general public prohibitive, but that they are not at all handy to use and that the helical springs are liable to injure the user. In addition to this the appliances are very heavy and the manner in which the helical springs are attached to the handles is extremely inconvenient and complicated, so that they cannot be regarded as a good marketable article.

The chest expander according to the present invention is free from these disadvantages, as it does not have the heavy and expensive helical springs and as the extensible member is formed of a single strand rubber tube. The grip at either end, which in the old appliances had the form of a stirrup, is in the new appliance made in the form of a ball, which provide the practical advantage from the user's point of view, of powerfully and efficiently developing the hands gripping the balls. The danger of injury is also entirely eliminated owing to the use of the rubber tube, so that such chest expanders may be safely used for developing the body, even by children, which has been impossible with the appliances hitherto in use. The chest expander made in accordance with the present invention is an eminently saleable article which is very cheap to manufacture and can be bought by the general public owing to its low price. For fixing the rubber tube in the balls, the latter are provided with axial conical holes, the tube being clamped and held in the said

holes by conical plugs provided with grooves.

The accompanying drawing shows a constructional example of the chest expander according to the present invention, in which Fig. 1 is a longitudinal section and Fig. 2 a plan view.

The chest expander consists of a single strand rubber tube *c* and of the two balls *a* and *b* which serve as grips at the two ends of the tube for the hands of the user. These balls are provided with bores which are in part cylindrical, as at *d*, and in part flared to the outside, as at *e*. In these bores are conical plugs *f* having grooves *g*. For fixing the balls on the two ends of the tube, the plug *f* is first inserted in the tube, after which the tube is drawn from the outside into the bores. Through the pressure on the plug from the outside the tube is pressed against the wall of the bore, the material being forced into the grooves *g* and the tube being thus held firmly in the bores. It is impossible for the extensible member to become loose, as owing to the tensional forces in the bores, when the chest expander is in use, the plugs become more and more firmly pressed into the bores and wedge the tube against the walls.

The wedge-shaped plug may have only a single groove, which will also ensure a firm connection between the tube and the balls. In place of the plug a ball may be used, which is slightly larger in diameter than the cylindrical portion of the bore, thus securing the connection of the ball and the tube.

What I claim is:

An appliance for bodily exercise, comprising in combination a rubber tube serving as an extensible member; two ball-shaped grips at either end of the said member; a bore provided in each of said grips and being partly cylindrical and partly outwardly flared; conical plugs provided with grooves fitted in the tube and adapted to serve as wedge members for fixing the extensible member in the said ball-shaped grips.

In testimony whereof I affix my signature.

BRUNO NEUMANN.