No. 781,555. PATENTED JAN. 31, 1905.

A. B. SCHANZ.

MOVEMENT CURE DEVICE.

APPLICATION FILED JUNE 25, 1904.

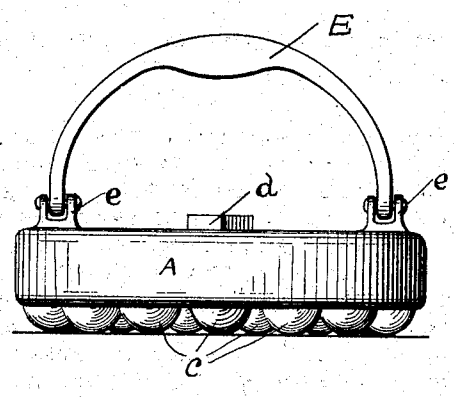


FIG. 1.

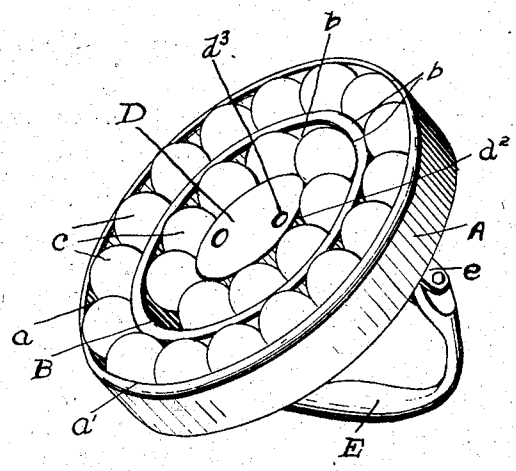


FIG. 2.

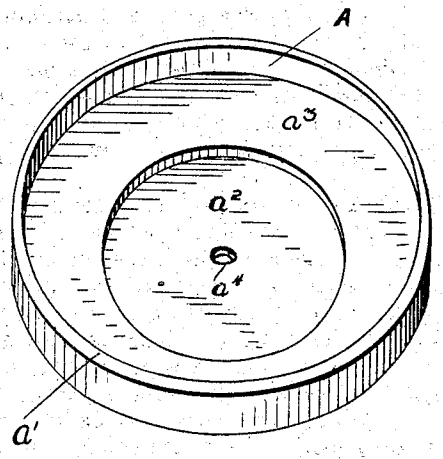


FIG. 3.

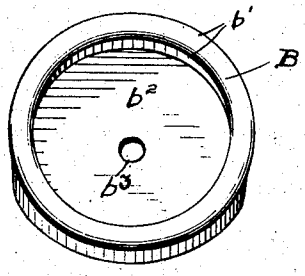


FIG. 4.

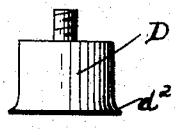


FIG. 5.

WITNESSES:

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No. 781,555. Patented January 31, 1905.

UNITED STATES PATENT OFFICE.

ALFRED B. SCHANZ, OF ATTICA, INDIANA.

MOVEMENT-CURE DEVICE.

SPECIFICATION forming part of Letters Patent No. 781,555, dated January 31, 1905.

Application filed June 25, 1904. Serial No. 214,140.

To all whom it may concern:

Be it known that I, ALFRED B. SCHANZ, a citizen of the United States, residing at Attica, in the county of Fountain and State of Indiana, have invented certain new and useful Improvements in Movement-Cure Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a ball-bearing massage-roller which shall be exceedingly simple in construction and most efficacious in operation.

A further object is by the peculiar construction of my device to avoid the necessity of the use of lubricant, thus eliminating the expense, loss of time, and annoyance due to such use.

With these objects and others in view the invention consists in the novel construction, combination, and arrangement of parts, as herein fully illustrated, described, and claimed.

In the accompanying drawings, forming part of my specification, and in which like letters of reference indicate corresponding parts throughout the several views, I have illustrated one embodiment of my invention, though it is to be understood that other embodiments thereof may be used without departing from the spirit of my invention.

In the drawings, Figure 1 is a perspective view of my device. Fig. 2 is a like view, the device being tilted and resting on the handle. Fig. 3 is a detail perspective view of the larger cup of my device, showing more particularly the depression in said cup for the reception of the smaller cup. Fig. 4 is a detail perspective view of the smaller cup of my device, and Fig. 5 is a detail view of the plug-bolt.

Referring in detail to the drawings, in this instance I have shown two cups or pans A B, which may be of any suitable size, shape, and material, but desirably of a size convenient to handle, of the circular shape shown, and formed of hard rubber or ebonite, and which cups when assembled for operation form concentric channels or runways a b for balls or rollers C, disposed contiguously therein. It is to be understood that, if desired, instead of providing two separate cups the same may be formed, carved, or otherwise shaped out of a single piece of material and also that one, two, or more cups may be assembled in one device, forming a plurality of runways. The edge of the cup A may be curved inward, as at a', to retain in position the series of balls therein. The edge of the cup B may be curved, as at b' b', to retain in position the series of balls therein. It is to be understood that other provision may be made for insuring retention of the balls in the device. A circular portion a^2 of the bottom a^3 of the cup A may be dished or depressed outward to a depth corresponding to the thickness of the bottom b^2 of the cup B, in which depressed portion of the cup A the bottom b^2 of the cup B sinks or fits when the parts are assembled. Thus the two bottoms a^3 and b^2 of the cups A and B coincide in the same plane, insuring that all the balls in the two channels or runways shall project the same distance beyond the outer edges of the cups, as shown in Figs. 1 and 2.

The cup A may be provided centrally with a screw-threaded or other opening a^4, registering with a central screw-threaded or other opening b^3 in the cup B, in which openings may be screwed a plug-bolt D, a plate or nut d clamping the same in place, as shown in Fig. 1. The bolt is preferably curved, as at d^2, to aid in preventing displacement of the balls. One or more holes d^3 may be provided in the screw-bolt D, so that projections on a key or screw-driver may engage therewith in separating the parts of my device.

A handle E, hinged to lugs e e, disposed exteriorly of the cup A, may be provided, so that the handle may fold or lie flat when not in use and for purpose of occupying a small compass for shipment.

It will be noted that the balls are of such a size relative to the depth of the cups that they project somewhat beyond the circular edges thereof.

In operation rectilinear movement, with slight pressure, of my device over the skin of a patient causes the balls or rollers to revolve in their channels, thus producing a mild torsion of the skin and of the muscular tissues

underneath, which is highly stimulating to superficial nerves and blood vessels without any friction or irritation whatever. In many other forms of massage-rollers a lubricant must be used to prevent chafing of the skin; but my device is used "dry" and accomplishes its beneficial purpose without "rubbing." An additional virtue in my device may be gained by making the cups and the plug-bolt of hard rubber or ebonite and the balls or rollers of glass. This makes the roller device a non-conductor of heat and insures electric insulation, and when used on the dry skin there is no absorption or loss by radiation of body heat or vital force.

I am aware of Patents Nos. 598,773 and 754,925; but not only is the construction of my device radically different from the constructions disclosed in the devices of these patents, but so far as the device of the first-mentioned patent is concerned by the peculiar formation of my structure so that it is possible to have the balls disposed contiguous to or touching each other and not spaced, as in the patent, the efficiency of my device over that of the device of the patent is greatly enhanced, and the operation and the results attained by the use of my device are different and more desirable than the operation and results attained by the use of the device of the patent in question. So far as Patent No. 754,925 is concerned, my peculiar device accomplishes the desired work and results in a fraction of the time required in the use of the device of this patent, and the construction of my device is, moreover, entirely different from that of this patent.

Having thus fully described my invention, and without limiting myself to minor details of construction, what I claim as new, and desire to secure by Letters Patent, is—

1. In a movement-cure device, a cup or receptacle and contacting balls or rollers disposed and held therein against accidental removal, each ball projecting beyond the outer edge thereof.

2. In a movement-cure device, a cup or receptacle formed to provide a runway, and balls or rollers loosely disposed in the runway and projecting beyond the outer edge thereof.

3. In a movement-cure device, a cup or receptacle, an annular wall disposed therein, means for holding the wall therein, and contiguous or contacting balls disposed between the cup and the wall and adapted to extend or project beyond the outer edge thereof.

4. In a movement-cure device, a cup or receptacle provided centrally with an opening, a smaller cup or receptacle disposed in the larger cup or receptacle and provided centrally with an opening, a series of contiguous or contacting balls disposed within the larger cup, a second series of contiguous or contacting balls disposed within the smaller cup, both series of balls being adapted to extend beyond the outer edges of the cups, and a screw-bolt passing through the two openings in the cups.

5. In a movement-cure device, a cup or receptacle provided with an inturned edge and with a central opening, a smaller cup or receptacle disposed within the larger cup or receptacle and provided with a flanged edge and with a central opening, a series of contiguous or contacting balls disposed within the larger cup, a second series of contiguous or contacting balls disposed within the smaller cup, and a screw-bolt passing through the two openings in the cups.

6. In a movement-cure device, a cup or receptacle provided with a depressed portion, an inturned edge, and a central opening; a smaller cup or receptacle disposed within the depressed portion of the larger cup, and provided with a flanged edge and with a central opening; a series of contiguous or contacting balls disposed within the larger cup; a second series of contiguous or contacting balls disposed within the smaller cup; and a screw-bolt passing through the two openings in the cups.

7. In a movement-cure device, a cup or receptacle provided with a depressed portion, an inturned edge, and a central opening; a smaller cup or receptacle disposed within the depressed portion of the larger cup, and provided with a flanged edge and with a central opening; a series of contiguous or contacting balls disposed within the larger cup; a second series of contiguous or contacting balls disposed within the smaller cup; a screw-bolt, provided with a curved bore, passing through the two openings in the cups; and a handle hinged to the larger cup.

In testimony whereof I affix my signature in the presence of two subscribing witnesses.

ALFRED B. SCHANZ.

Witnesses:

EDW. L. BOUGHAM,

JOHN R. NEWLIN.