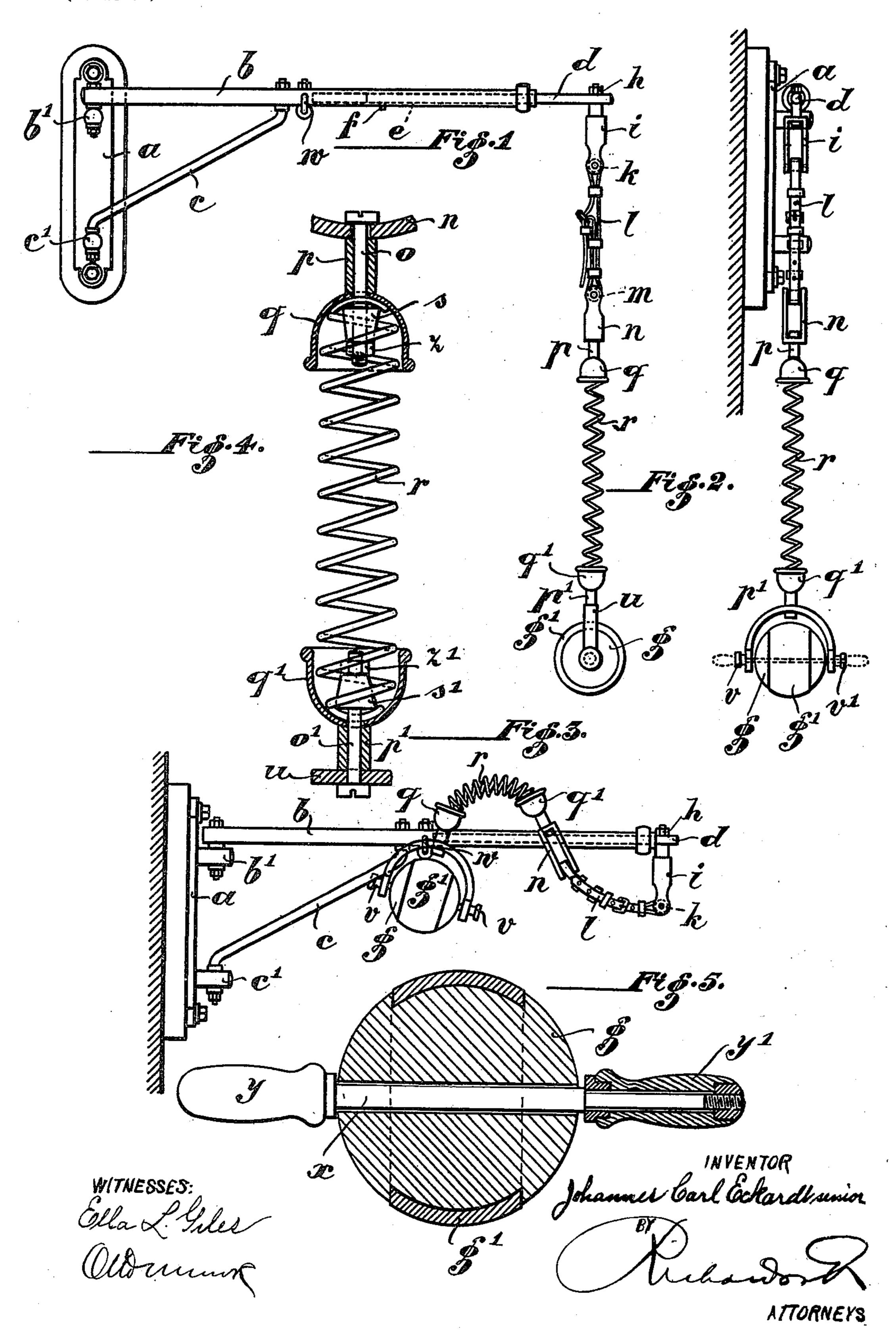
## J. C. ECKARDT, SR. MASSAGE APPARATUS.

(No Model.)

(Application filed Aug. 10, 1899.)



## United States Patent Office.

JOHANNES CARL ECKARDT, SR., OF STUTTGART, GERMANY.

## MASSAGE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 670,199, dated March 19, 1901.

Application filed August 10, 1899. Serial No. 726,790. (No model.)

To all whom it may concern:

Be it known that I, JOHANNES CARL ECK-ARDT, Sr., a subject of the King of Würtemberg, residing at Stuttgart, Germany, have in-5 vented a new Massage Apparatus, of which the following is a full, clear, and exact description.

The massage hitherto employed against costiveness and constipation and exercised by hand by means of balls had the disadvantage to that the patient and the massaging person are soon fatigued by the balls having a relatively great weight, so that the massage could never be effected successfully and constantly.

The object of my invention is to overcome 15 this drawback by hanging up the massageball on a frame preferably fastened at the wall by means of an elastic piece, so as to attain a massage acting, at pleasure, more or less intensive.

In the accompanying drawings a massage apparatus of this kind is illustrated, as follows:

Figure 1 is a side view thereof. Fig. 2 shows a front view, and Fig. 3 a side view, 25 in another position, while Figs. 4 and 5 represent details on an enlarged scale.

With a plate a, fixed at the wall, is connected a horizontal arm b, being provided with a stay c. The arm b and the stay c are pivot-30 ally arranged around the points b' and c', respectively. Within the tubular arm b slides a rod d, the movement of which is limited by

means of a slot e and a pin f. The massage-ball g, partially covered with 35 a rubber ring g', is vertically hung upon the  $\operatorname{rod} d$  in the following way: At the front end of the rod d is fastened, by means of a screw h, a yoke i, to the roller k of which an adjustable strap l is connected. The lower end of 40 the said strap is also hung around a roller m, journaled within an analogous yoke n. By means of a screw o and a disk p is fastened to the yoke n a bell-shaped casing q, to which I have fixed an elastic and yielding interme-45 diate piece, the lower end of which is in connection with a second casing q'. This elastic piece may be of any suitable kind. In the example shown the said piece is formed as a coiled spring r, the ends of which being sol-50 dered with nut-pieces s s' of the casings q q',

as clearly shown by Fig. 4. The nut-pieces

in place by means of screws o o', disks p p', and counter-nuts z z'. The screw o' is connected with a yoke u, between the legs of which 55 is journaled the massage-ball g by means of a knop-pin v and a nut v' in such a manner that it is able to produce a rolling motion.

The application and action of this apparatus are as follows: Having placed the frame in 60 a suitable height and having properly adjusted the ball g by turning the arm b and shifting the rod d and the strap l, so that the ball is a short distance—say about forty to fifty millimeters—over that part of the human 65 body which is to be treated with the ball—as, for instance, the belly—then the apparatus is ready for commencing the massage action. This is effected by seizing the yoke u of the ball with the hand and moving it in such a 70 manner that the ball makes at the same time a horizontally-rolling and a vertically-falling motion.

As already stated, the rolling motion is rendered possible by loosely arranging the 75 ball around the pin v, while the falling or the vertical up-and-down motion of the ball is effected by means of the coiled spring r, which, if desired, could also be substituted by an elastic piece of another material, such as rub- 80 ber or the like.

In the aforesaid manner I produce an effect equal to that which is attained by the massage by hand. The essential feature consists therein that in cases of costiveness and 85 constipation or similar diseases the patient is enabled to effect the massage himself without any fatigue even on a more or less intensive way, according as the elasticity of the spring is used in a greater or less degree.

When the apparatus is not used, the ball g may be hung on a hook w, fastened to the arm b, as seen by Fig. 3.

By unscrewing the nut v' and withdrawing the pin v the ball g can be exchanged, so that 95 it can also be used for applying the massage on the back, the genuflection beneath the arms, or another part of the body. For this purpose the ball is put upon a reserve pin x, provided with a fixed and a movable handle 100 y and y', respectively, Fig. 5. If desired, the reserve pin x could also be journaled within the yoke u instead of the pin v, Fig. 2 in dotss' and the casings qq', respectively, are held I ted lines, so as to attain after seizing the handles yy' a constantly yielding and rolling action of the ball loosely mounted on the pin x.

It is to be seen that the pin v is not abso-

lutely necessary.

The frame shown in the drawings has the advantage that an adjustment in any desired position is easily attained by means of the arm b, rod d, and strap l. It is, however, to be remarked that this frame might also be substituted by another suitable one without altering the function of my apparatus.

What I claim, and desire to secure by Let-

ters Patent, is—

1. In an apparatus for massage the combination of an elastic intermediate piece consisting of a coiled spring r and bearing the massage-ball by means of a yoke u, substantially as described.

2. In an apparatus for massage the combination of a massage-ball hung upon a frame 20 by means of a spring the frame consisting of a pivot-arm b, a rod d sliding therein and an adjustable strap l, substantially as described.

3. In an apparatus for massage the combination of a massage-ball journaled within a 25 yoke by means of a knop-pin v and a nut v' in such a manner that the ball is exchangeable after unscrewing the knop-pin, as and for the purpose set forth.

In witness whereof I have hereunto set my 30

hand in presence of two witnesses.

.

-

JOHANNES CARL ECKARDT, SENIOR.

Witnesses:
KARL BOSCH,
HERMAN WAGNER.