March 11, 1930. N. E. GOODRICH 1,750,303

MASSAGING MACHINE

Filed May 19, 1927

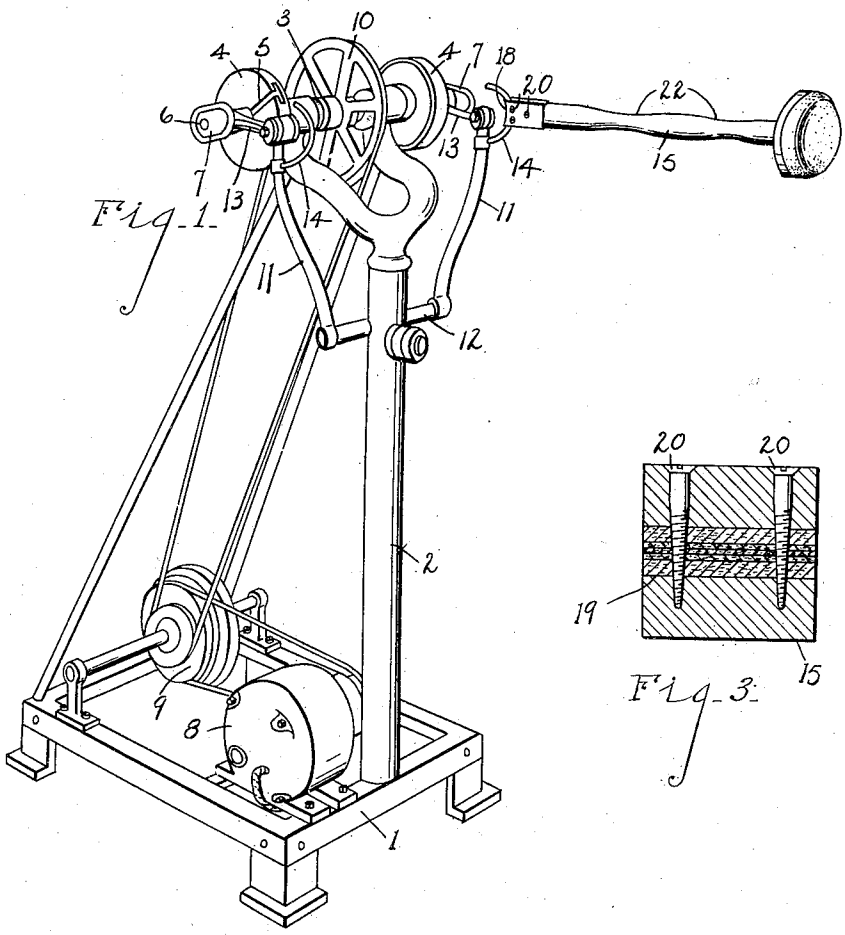


Fig. 1.

Fig. 3.

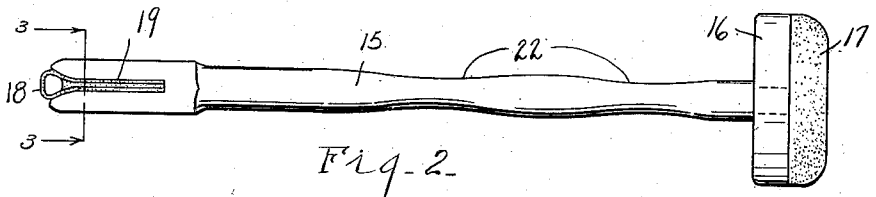


Fig. 2.

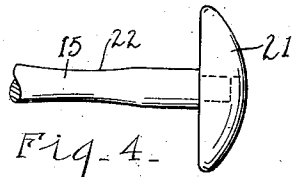


Fig. 4.

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UNITED STATES PATENT OFFICE

NORRIS E. GOODRICH, OF BATTLE CREEK, MICHIGAN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO SANITARIUM EQUIPMENT COMPANY, OF BATTLE CREEK, MICHIGAN

MASSAGING MACHINE

Application filed May 19, 1927. Serial No. 192,594.

My improvements relate to massaging machines of the type shown in Letters Patent No. 1,585,923 issued May 25, 1926, to John H. Kellogg and Norris E. Goodrich.

The main object of this invention is to provide an improved massaging machine of this class which is adapted for imparting a kneading movement or a series of blows, according to the manner of application.

Objects pertaining to details and economies of my invention will appear from the description to follow. The invention is defined in the claims.

A structure embodying the features of my improvements is illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view of my improved massaging machine.

Fig. 2 is a side view of the applicator unit employed therewith.

Fig. 3 is a section on line 3—3 of Fig. 2.

Fig. 4 is a fragmentary view of a modified form of applicator.

Referring to the drawing, 1 represents the base of the machine carrying an upright 2 forked at its upper end to support the shaft 3. This shaft carries a pair of crank disks 4 having radial dove-tailed grooves 5 therein to receive the crank pins 6. These crank pins are adjustably secured by means of the clamps 7.

The motor 8 is connected to a set of transmission pulleys 9 which are in turn connected to the pulley 10 on the shaft 3. These features, however, are substantially the same as in the said patent. A pair of rocker arms 11 are mounted on a cross arm 12 and connected by a pitman 13 to the crank pins. These rocker arms carry hooks 14. By adjusting the crank pins in their grooves 5 the length of the stroke of the hooks may be controlled.

I provide an applicator consisting of a non-flexible substantially stiff shank 15 carrying the head 16 which in the embodiment shown in Figs. 1 and 2 is provided with a facing pad 17. This shank has an eye 18 engageable with one of the hooks 14, the eye being formed of leather or other flexible material to permit its being slipped on the grooved hook 14, at the same time being a comparatively close fit thereon. In the embodiment illustrated the eye is formed of a strap folded upon itself, the ends of which are arranged in a longitudinal slot 19 formed in the shank. The shank is clamped upon the strap by means of the screws 20 which also pass through the strap as shown in Fig. 3.

In the modification shown in Fig. 4 the head 21 is solid, that is, the pad 17 is omitted. This type of head is desirable for certain conditions.

My improved massaging machine is especially designed for treating the stomach and bowels, the head of the applicator being held against the body and the shank 15 being provided with hand holds 22 for convenience in grasping.

The head may be swung about or moved about to treat different portions of the body with a series of blows or impacts, or with a massaging movement, depending on how closely the patient stands to the machine.

My improved massaging machine is highly desirable for treatment of various portions of the body, both from a purely exercising standpoint and for remedial purposes.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a massaging machine, the combination of a reciprocating driven element having a rearwardly facing curved hook thereon, and an applicator comprising a rigid shaft having an eye of substantial width closely but slidably and pivotally engaging said hook whereby the applicator may be swung vertically and laterally on said driven element relative to the plane in which the driven element reciprocates.

2. In a massaging machine, the combination of a reciprocating driven member provided with a rearwardly facing curved hook, and an applicator comprising a rigid shaft provided with an eye engaging said curved hook for vertical and lateral swinging adjustment thereon, relative to the plane in which the driven member reciprocates, said shaft being of substantial length so that the person treated may be positioned at the side

thereof and being provided with spaced handholds, said shaft having a head at its outer end.

3. In a massaging machine, the combination of a reciprocating driven member provided with a rearwardly facing curved hook, and an applicator comprising a rigid shaft provided with an eye engaging said curved hook for vertical and swinging adjustment thereon relative to the plane in which the driven member reciprocates.

4. In a massaging machine, the combination of a reciprocating driven element, and an applicator comprising a rigid shaft connected to said reciprocating element so that it may be swung vertically and laterally on said driven element relative to the plane in which the driven element reciprocates.

5. In a massaging machine, the combination of a reciprocating driven element, and an applicator comprising a rigid shaft connected to said reciprocating element so that it may be swung vertically and laterally on said driven element relative to the plane in which the driven element reciprocates, said shaft being provided with a head at its outer end and being of substantial length so that it may be brought sidewise to the body of the user, said head being provided with a facing pad of resilient material.

In witness whereof I have hereunto set my hand.

NORRIS E. GOODRICH.