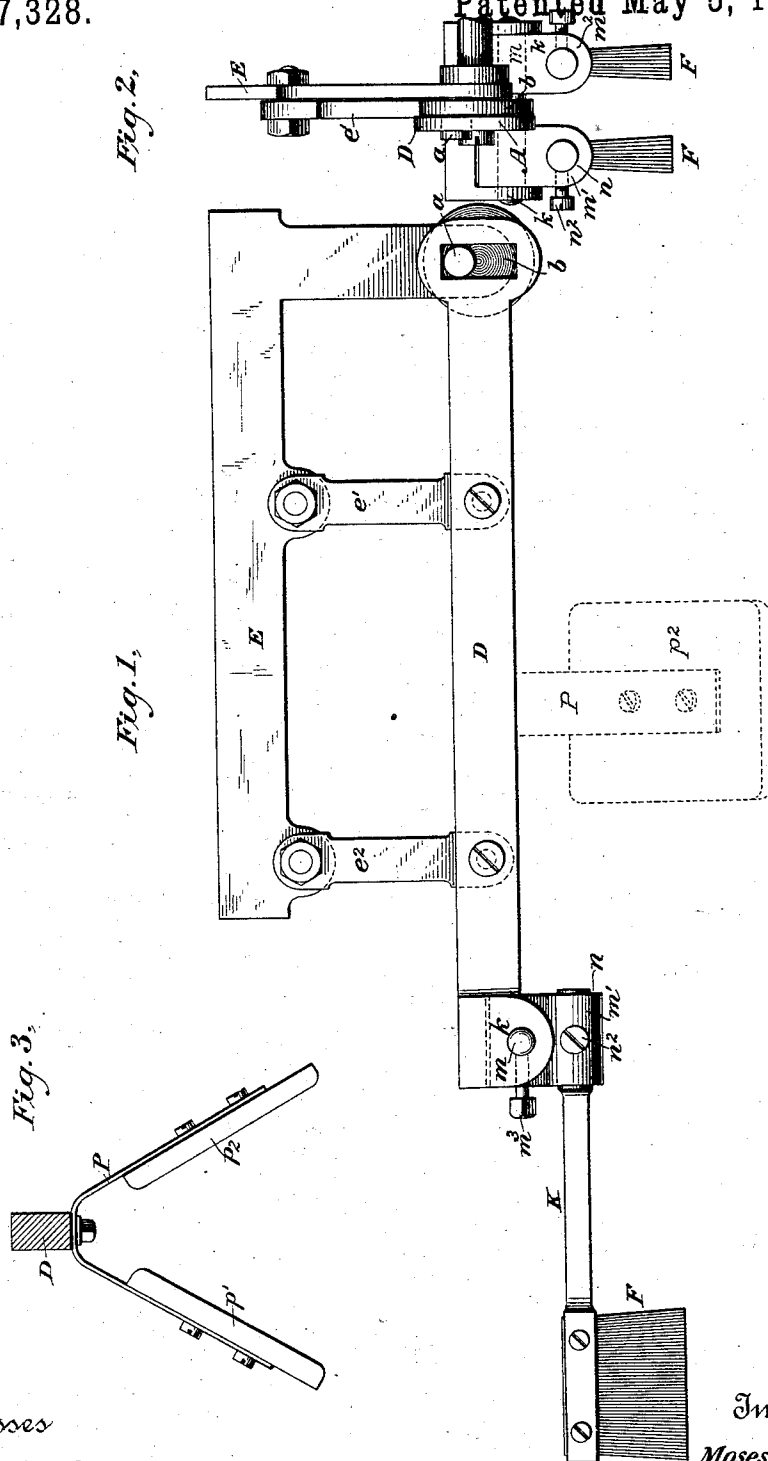


(No Model.)

M. G. FARMER.
MOVEMENT CURE APPARATUS.

No. 317,328.

Patented May 5, 1885.



Witnesses

Geo. W. Breck

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MOVEMENT-CURE APPARATUS.

SPECIFICATION forming part of Letters Patent No. 317,328, dated May 5, 1885.

Application filed March 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, MOSES G. FARMER, a citizen of the United States residing in New York, in the county and State of New York, have invented certain new and useful Improvements in Rubbing Apparatus for Medical Purposes, of which the following is a specification.

My invention relates to a class of apparatus employed for artificially producing oscillating or vibrating movements for the purpose of rubbing the human body to aid in the recovery of health.

The object of the invention is to provide convenient means for deriving from the rotary movement of a motor the horizontal movement of a suitable rubbing device, and to give to the brush a movement very nearly resembling that which is manually applied to patients.

The invention consists in applying to a revolving shaft a crank-arm, an eccentric wheel, or a cam which, when revolved, communicates a reciprocating movement to an arm attached thereto or coupled therewith. This arm is preferably supported by parallel links. Any suitable forms of rubbers or brushes may be carried in this arm or holder. The holder may be constructed with a joint, permitting the brushes to be raised if it is desired. It will be apparent that the movement of the brush will not be in a direct line, but that at some point in its movement it will be in an extreme forward plane, while at the limits it will be drawn backward. In other words, the movement of the brushes will be substantially in the arc of a circle having a diameter dependent upon the length of the supporting-arms. A great advantage is derived from this movement, for the operation upon the patient is much more effective. The brushes are preferably held in sockets, so that they may be turned for convenience in operating upon different parts of the body.

In the accompanying drawings, Figure 1 is a side elevation of such parts of the apparatus as are necessary to illustrate my invention, and Fig. 2 is an end view of the same. Fig. 3 shows a different method of applying the brushes.

Referring to the drawings, A represents a revolving shaft, which may be actuated in any convenient manner. At the end of this shaft

there is carried an eccentric wheel or a crank-arm of well-known construction. This crank-arm extends to a slot, *b'*, formed in one end of the arm D'. The revolution of the shaft A will, it is evident, cause the arm to be moved to and fro in the direction of its length.

The arm D' is designed to hold the brushes or rubbers F which it is desired to actuate. It is supported from the frame of the machine by two parallel arms or links, *e'* and *e''*, having their respective ends pivoted to the frame of the machine and to the arm D'. The length of the opening *b'* is sufficient to permit the movement of the arm D' in different planes as occasioned by the circular movements of the ends of the links *e'* and *e''* which are pivoted to the arm.

One extremity of the arm D is preferably provided with an arm, *k*, extending downward, as shown, and in this extension there is carried a short bar, *m*. Upon the bar there are placed two blocks, *m'* and *m''*. These may be turned upon or moved along the bar. They are held in any desired positions by set-screws *m'''*. In each of the blocks there is formed a cylindrical opening, *n*, for receiving a corresponding brush. Suitable set-screws, *n''*, extend inward toward the cylindrical openings. Into the openings *n* it is designed that the ends of suitable rubbers or brush-holders, K, shall be inserted, and the screws serve to bind the latter securely in any required position, while by loosening the screws the brushes may be turned axially.

The brushes may be inserted from either side—that is to say, they may project toward the cam or crank end of the arm D, or be in the positions shown in the drawings.

It will be evident from the foregoing description that when the shaft A is revolved the brushes or rubbers will be driven to and fro in an approximately constant plane, but that at some point, preferably near the center of its movement in each direction, they will be at an extreme downward position, whereas at the limits of its reciprocating movement they will be in planes slightly higher than the same. This change in the position of the rubbers is desirable for the purpose of obtaining an artificial rubbing very nearly resembling that which is manually applied to patients.

In Fig. 3 a different form of rubber is shown,

and this consists of a saddle-shaped support, P, secured to the arm D, preferably between the two links, and carrying two flexible rubbers, p' and p'' .

5 I claim as my invention—

1. The combination, substantially as hereinbefore set forth, with a rubber for medical treatment, of a reciprocating arm supporting and carrying said rubber, parallel pivoted links for sustaining said arm in its horizontal position, a revolving shaft, and a crank coupled with said reciprocating arm whereby a to-and-fro movement is communicated to said arm and rubber.

5 2. The combination, substantially as hereinbefore set forth, of two separate reciprocating rubbers each arranged on an independent axis parallel to the direction of motion, a holding-arm for the same, and means for permitting each rubber to be turned about its own axis and thus brought into contact with the surface to be rubbed.

3. The combination, substantially as hereinbefore set forth, of a reciprocating arm, a transverse rod or bar carried thereby, a movable block upon said rod or bar, means for adjusting the same, and a brush or rubber adjustably supported by said block. 25

4. The combination, substantially as hereinbefore set forth, of a reciprocating arm, two independent brushes or rubbers, adjustable holders for said brushes or rubbers supported from said arm, and means, substantially such as described, for permitting said brushes or rubbers to be turned axially in said holders. 30

In testimony whereof I have hereunto subscribed my name this 5th day of March, A. D. 1885. 35

MOSES G. FARMER.

Witnesses:

DANL. W. EDGECOMP,
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