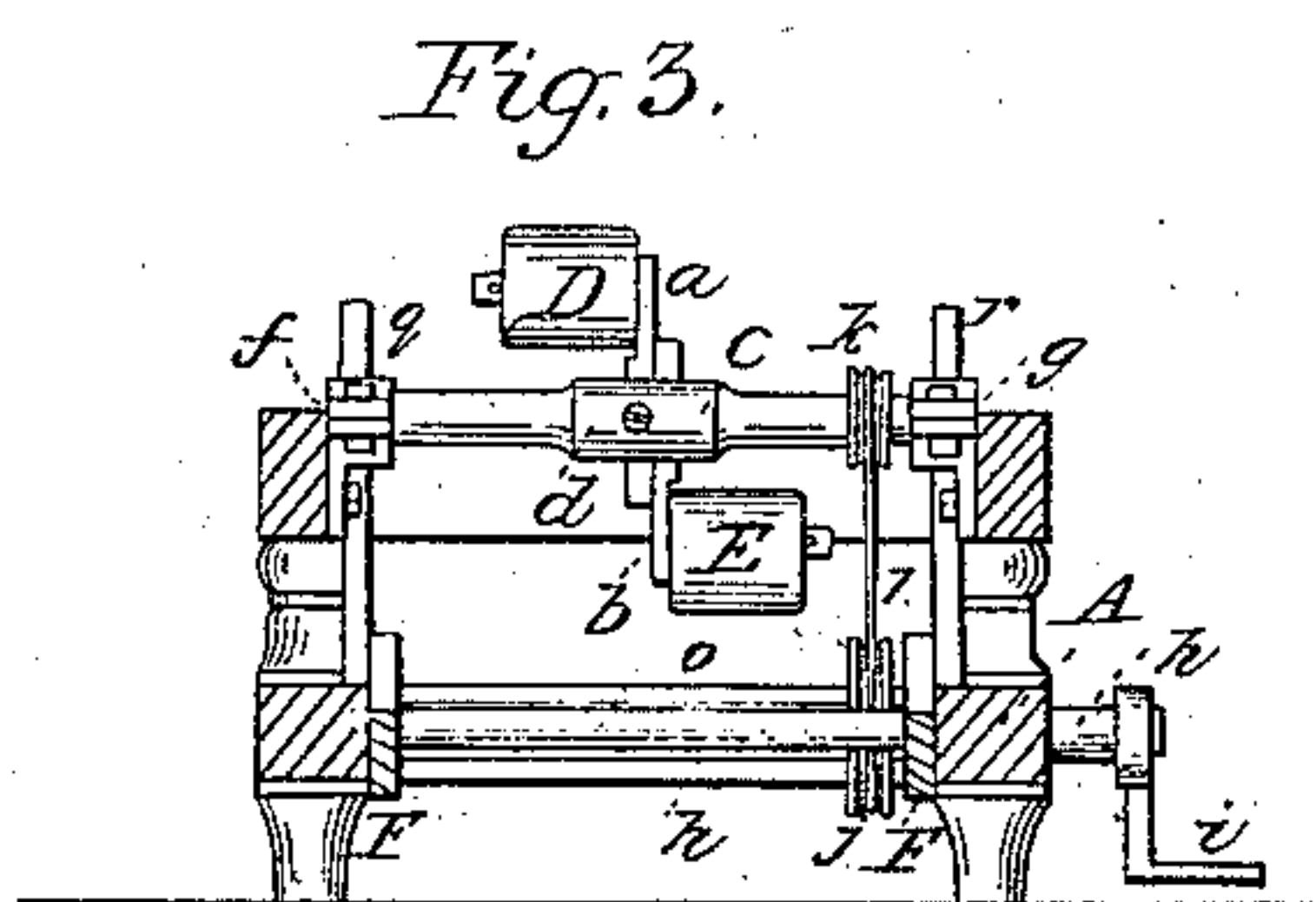
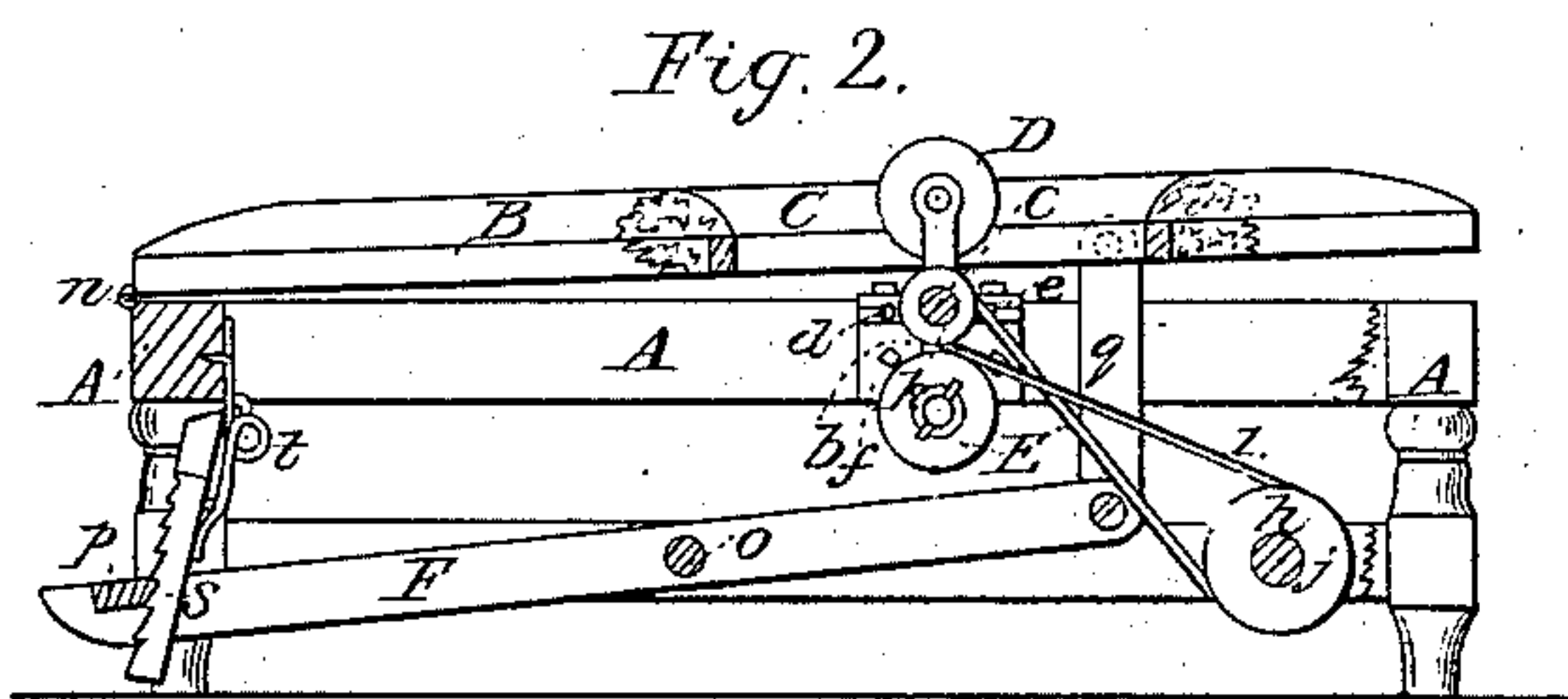
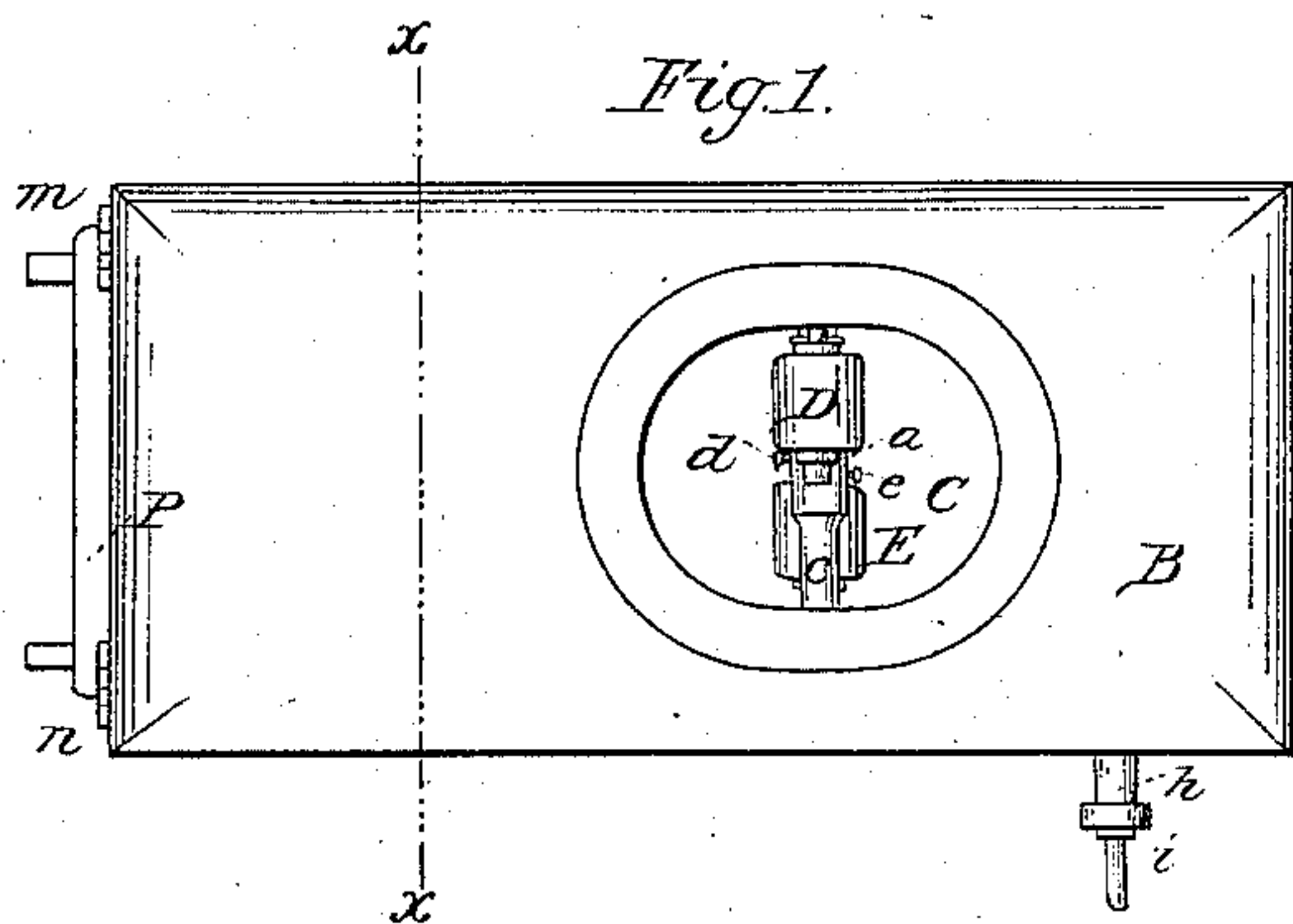


G. H. Taylor,

Morement Cure.

N^o 86,604.

Patented Feb. 2, 1869.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE H. TAYLOR, OF NEW YORK, N. Y.

IMPROVED MEDICAL VIBRATING AND KNEADING MACHINE.

Specification forming part of Letters Patent No. 86,601, dated February 2, 1869.

To all whom it may concern:

Be it known that I, GEORGE H. TAYLOR, of the city, county, and State of New York, have invented a certain new and Improved Medical Vibrating, Rolling, and Kneading Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists, first, in the combination, with one or more rollers, of a shaft to which the said rollers are attached by arms in such a manner that by rocking or turning the said shaft the said rollers may be made to pass repeatedly over the surface of the body properly placed to be operated upon; second, in attaching the said arms to the said shaft by passing them through slots therein and securing them with set-screws, whereby the rollers may be set at any required distance from the shaft, and thus be made to travel in a larger or smaller circle, as may be desired; third, of two or more rollers hung at the extremities of arms which project radially from a revolving shaft, the said rollers being capable of traveling in different paths, and so arranged as to operate alternately upon the opposite sides of that portion of the body under treatment, whereby a peculiar and desirable curative effect is produced; fourth, in the combination with the said roller or rollers and said shaft, of a driving-shaft, pulleys, and an endless belt for giving motion to the said rollers, the said driving-shaft being driven by the hand, or steam or other power, through a crank or any other suitable mechanical device; fifth, in the combination, with the said roller or rollers and the said mechanism for actuating it or them, of an adjustable couch or table having an opening through it, through which opening the said roller or rollers operate upon that portion of the body placed immediately over said opening; sixth, in the combination, with the frame of the machine and the said couch or table, of a pedal or lever actuated by the foot to raise or lower the said couch, or one end of it, thereby increasing or diminishing the pressure of the said rollers upon the body; seventh, in the combination, with the said frame and pedal, of a spring-catch or rack, constructed and operated substantially as hereinafter set forth, for retaining the end of the said couch at any desired elevation.

The object of my invention is to produce a movement and agitation of parts of the human body by passing a roller over or across said portions, and without causing a rubbing or friction, whereby certain curative effects are more certainly produced than when such friction occurs.

In the accompanying drawings, Figure 1 is a plan of a machine embodying my invention. Fig. 2 is a side elevation of the same, certain parts being represented as cut and broken away, so that the construction of the rest may be more clearly seen. Fig. 3 is a vertical cross-section on the line *xx*, Fig. 1, showing the parts to the right of that line.

A is the frame of the machine; B B, the couch or table on which the patient sits or reclines; and C is the opening in the said couch through which the rollers operate.

The working parts of the machine are attached to or placed upon the frame A.

D and E are the rollers. I prefer to make these of wood; but rubber and other substances may be employed for that purpose. The rollers are hung in or upon the outer extremities of arms *a* and *b*, which are bent so that the axes of said rollers are parallel with the axis of motion. These arms are passed through a hole or slot in the shaft *c*, and are secured in place by set-screws *d* and *e* at any desired distance from the shaft *c*.

The bearings *f* and *g*, for the shaft *c*, are secured to the top rail of the frame A, and in the bottom rail of the said frame the driving-shaft *h* is hung.

Motion is imparted to the driving-shaft *h* through the crank *i*, or other suitable device, by the hand, or by steam or other power, and it is communicated to the shaft *c* and rollers by or through the pulleys *j* and *k* and belt *l*.

The couch or table B is hinged to the frame A by means of hinges *m n*, so as to allow the opposite end to be raised or lowered.

F is a lever or frame, pivoted or hung on the rod *o*, the ends of which are set into the lower rails of the frame A in such a manner as that when the outer end is depressed by bearing upon the step *p* with the foot the other end rises, and being connected to the couch or table B by the arms *q* and *r* the end of the said table rises with it. When the end of the couch is at the desired height the rack or catch *s* is thrown out-

ward by the spring *t* and catches upon the step *p*, as seen in Fig. 2, whereby the said end of the couch B is prevented from descending. By pressing with the toe against the catch *s* the lever is released and the couch is allowed to descend.

From one to eight, or more, rollers may be used, as desired, and they may be so set as to travel in two parallel paths, each alternate roller traveling in the same path; or they may be so set as to all follow in the same track, though the former method is preferred, especially for slow motions.

The machine constructed as described may be driven at such speed that there shall be a contact or passage of a roller upon or across that portion of the body of the patient under treatment from fifty or less to twelve hundred or more times per minute. When the speed is from fifty or less to about two hundred per minute the effect is soothing, laxative, and calculated to increase muscular action and development, while a more rapid motion causes a jarring or vibration of the parts and stimulates absorption of the fluids, equalizes their distribution, and promotes a healthy excretion.

The effects this machine is intended and calculated to produce are, in fact, very similar to those produced by a machine for which a patent was granted to me on or about the 3d day of March, 1868; but these effects are produced in a better manner and to a greater extent, and some objections to the use of the former machine in certain cases are removed.

Where a lateral as well as a vertical motion or movement is desired, it may be obtained to better advantage in the present than in the former machine, as the rollers prevent the dragging or pulling of the cloths or the rubbing of that portion of the body exposed to their action, which rubbing, in many cases, is not desirable.

An apron or diaphragm, of leather, cloth, or other suitable material, may be secured by its

edges to the edges of the opening in the couch in either the former or the present machine, whereby this rubbing may be more effectually prevented.

Having thus fully described my invention, I claim—

1. The combination, with one or more rollers, D E, of the shaft *c* and the arms *a b*, by which the said rollers are attached to the said shaft so as to rock or turn with it, substantially as hereinabove set forth.

2. Securing the arms *a b* to the shaft *c* by passing them through slots in the said shaft and fastening them with set-screws, whereby the distance of the rollers D E from the shaft *c* may be varied as desired, substantially as set forth.

3. The arrangement of the rollers D E in relation to each other and to the shaft *c* in the manner shown and described, whereby the said rollers are made to move in different planes and to operate on opposite sides of that portion of the surface of the body under treatment, substantially as specified.

4. The combination, with the rollers D E, arms *a b*, and shaft *c*, of the shaft *h*, pulleys *j* and *k*, and belt *l*, substantially as described.

5. The combination, with one or more rollers, constructed and actuated substantially as and for the purpose set forth, of a couch or table, A, furnished with an opening, C, through which said rollers may operate.

6. The combination, with the frame A and couch B, of the lever-frame F and step *p*, substantially as set forth.

7. The combination, with the frame A, frame F, and couch B, of the rack or spring-catch *s*, substantially as described.

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Witnesses:

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