

(No Model.)

J. M. W. KITCHEN.

EXERCISING CHAIR.

No. 329,653.

Patented Nov. 3, 1885.

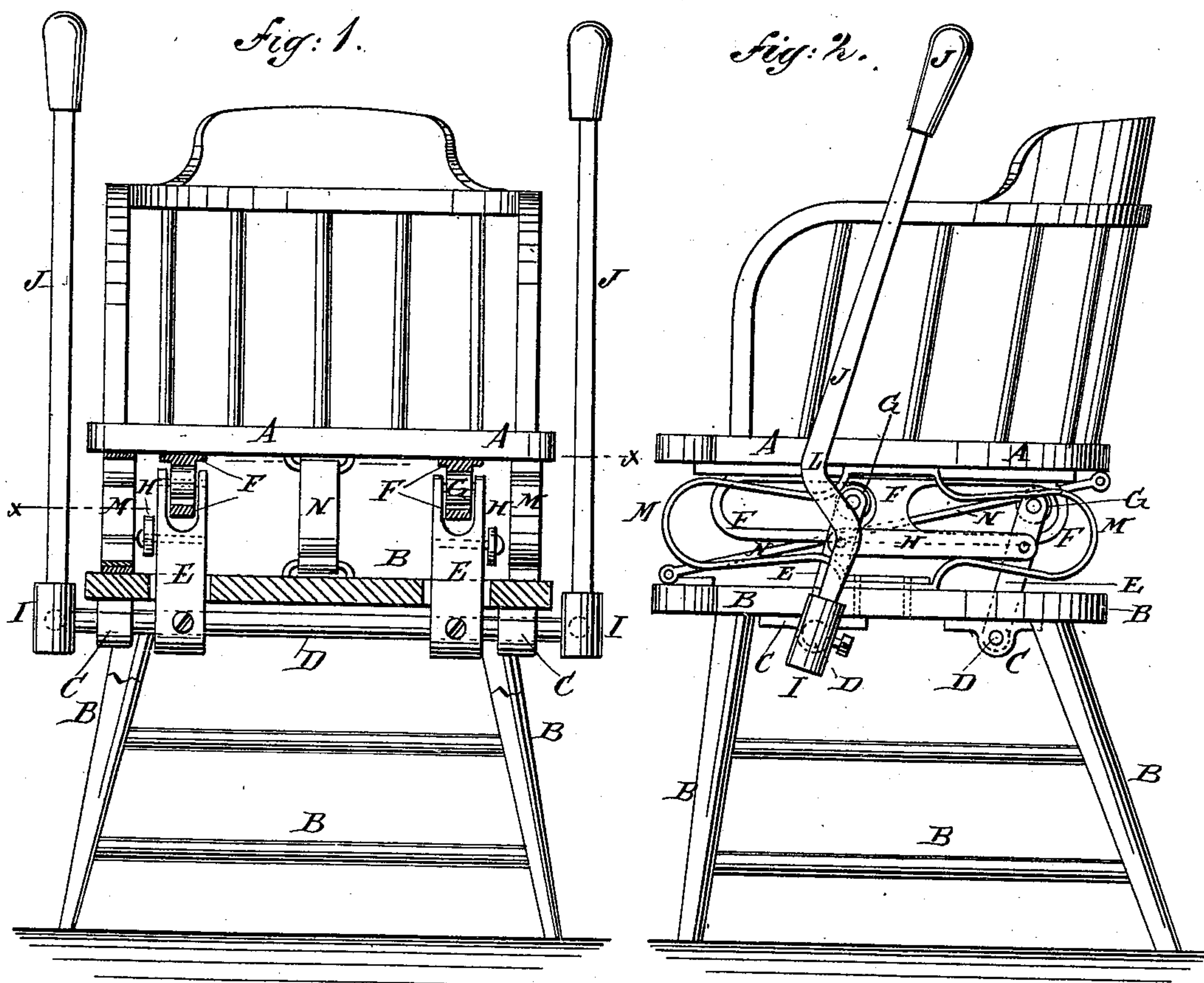
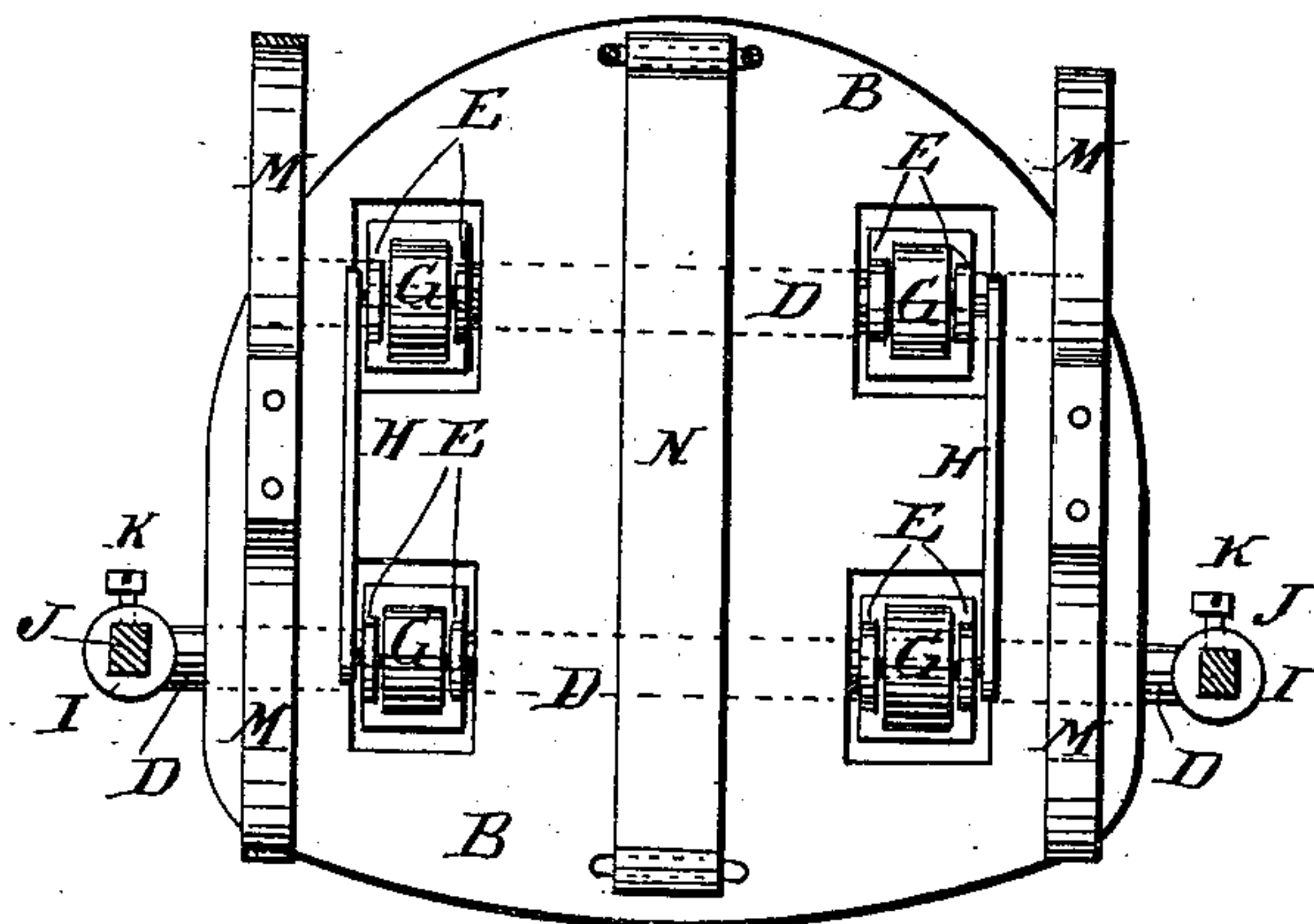


Fig. 3.



WITNESSES:

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JOSEPH M. W. KITCHEN, OF NEW YORK, N. Y.

EXERCISING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 329,653, dated November 3, 1885.

Application filed June 19, 1884. Serial No. 135,404. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH M. W. KITCHEN, of the city, county, and State of New York, have invented certain new and useful Improvements in Exercising-Chairs, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation, partly in section, of my improvement. Fig. 2 is a side elevation, of the same. Fig. 3 is a sectional plan view of the same, taken through the broken line *xx*, Fig. 1, the slotted bars being removed.

This invention relates to that class of exercising-chairs in which a vertical jolting motion is given to the seat of a chair by means of mechanism connected with the chair and operated by a person sitting in the said chair, to give exercise to the internal organs of the body, especially those of the abdomen, in the cure and prevention of disease.

The object of the invention is to improve the construction of exercising-chairs in such a manner as to make them more convenient and effective in use than when constructed in the ordinary manner.

The invention consists in an exercising-chair constructed with its seat and pedestal connected by two shafts, two pairs of standards, and their rollers and connecting-bars, slotted bars to receive the rollers, and operating handles, whereby the oscillation of the said handles will give an up-and-down movement to the chair seat. Springs are interposed between the chair-seat and pedestal to equalize the motion of the seat and assist the said seat in rising as the handles are being brought to a vertical position. The handles are made with offsets in their lower parts to adapt the said handles to be adjusted as the length of the trunk, length of arm, and breadth of shoulder of the operator may require. The seat and pedestal are further connected by a hinged bar to limit the backward and forward oscillation of the said seat while being raised and lowered, as will be herein-after fully described.

A represents the seat of the chair, which is made separate from the pedestal B. The seat A and the pedestal B are preferably made of wood. To the forward and back parts of the

top of the pedestal B are attached two pairs of bearings, C, in which rock two shafts, D. To each shaft D are rigidly attached the lower ends of two standards, E, the upper ends of which are slotted to receive the lower end parts of the slotted bars F and the rollers G, placed within the said slots and pivoted to the said standards. The standards E upon each side are kept parallel with each other by connecting-bars H, the ends of which are pivoted to the said standards. The slotted bars F are securely attached to the lower side of the chair-seat A. The ends of the forward shaft, D, project, and to them are rigidly attached, or upon them are formed, sockets I, to receive the lever-handles J, which are secured in the said sockets by set-screws K. The handles J have offsets L formed in them near their lower ends, as shown in Fig. 2. By this construction, by turning or rotating the handles in the sockets they can be adjusted according to the length of arm and the breadth of shoulder of the patient, and by adjusting the handles vertically in the sockets they can be adapted to the length of trunk of the patient. With this construction, as the handles J are moved in either direction from a vertical position, the seat will be lowered and will be again raised as the said handles are moved toward a vertical position.

Between the chair-seat A and the top of the pedestal B are interposed springs M, of any suitable shape or material, to equalize the motion and help the seat to rise when the handles are being brought back to a vertical position. To the forward part of the top of the pedestal B is hinged the lower end of a bar N, the upper end of which is hinged to the rear part of the seat A, to prevent the said seat from having too much backward and forward oscillation when being raised and lowered.

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

1. In an exercising-chair, the combination, with a seat and a pedestal below the same, of rock-shafts provided with arms and means for connecting said arms together and to the chair-seat, substantially as herein shown and described.

2. In an exercising-chair, the combination, with a seat and a pedestal below the same, of shafts journaled in the pedestal, and provided

with arms connected together and having their upper ends provided with rollers working in ways on the under side of the chair-seat and a handle for rocking said shafts, substantially as herein shown and described.

3. In an exercising-chair, the combination, with the seat A and its pedestal B, of the two shafts D, the two pairs of standards E, the rollers G, the slotted bars F, the connecting-bars H, and the handles I, substantially as herein shown and described, whereby the oscillation of the said handles will give an up-and-down movement to the chair-seat, as set forth.

4. In an exercising-chair, the combination, with the chair-seat A, the pedestal B, the shafts D, the standards E, the rollers G, the slotted bars F, the connecting-bars H, and the handles I, of springs M, substantially as herein shown and described, whereby the motion of the seat will be equalized and the said seat will be assisted in rising as the handles are being brought to a vertical position, as set forth.

5. In an exercising-chair, the combination, with sockets I, of handles J, having bends or offsets, and adapted to be fitted into the sockets in such different positions that their upper parts may be located conveniently for occupants of the chair-seat, having different lengths of arms and breadths of shoulders, substantially as specified.

6. In an exercising-chair, the combination, with the socket I, of the handles J, having bends or offsets L, and adjustably secured in said sockets by set-screw, substantially as here-

in shown and described, whereby provision is made for adjusting the handles to the length of trunk of the operator, as set forth.

7. In an exercising-chair, the combination, with a chair-seat, a pedestal below the seat, and mechanism for producing a vertical vibratory motion in the seat, of a spring or springs supported by the pedestal, and which equalizes the motion of the seat, substantially as specified.

8. In an exercising-chair, the combination, with the seat A and pedestal B, of the bar or strap N, extending between the seat and pedestal, and having its ends pivoted to the seat and pedestal, respectively, substantially as herein shown and described.

9. In an exercising-chair, the combination, with the seat A, the pedestal B, the shafts D, the standards E, the rollers G, the slotted bars F, the connecting-bars H, and the handles I, of the hinged connecting-bar N, substantially as herein shown and described, whereby the backward and forward oscillation of the said seat while being raised and lowered is limited, as set forth.

10. In an exercising-chair, the combination, with the seat A, of the pedestal B, the springs M, the shaft D, provided with sockets near its outer ends, and the handles I, interlocking with said sockets, substantially as specified.

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Witnesses:

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