

(No Model.)

J. BATES.

Combined Weight, Manual and Pedal Power Apparatus.

No. 241,182.

Patented May 10, 1881.

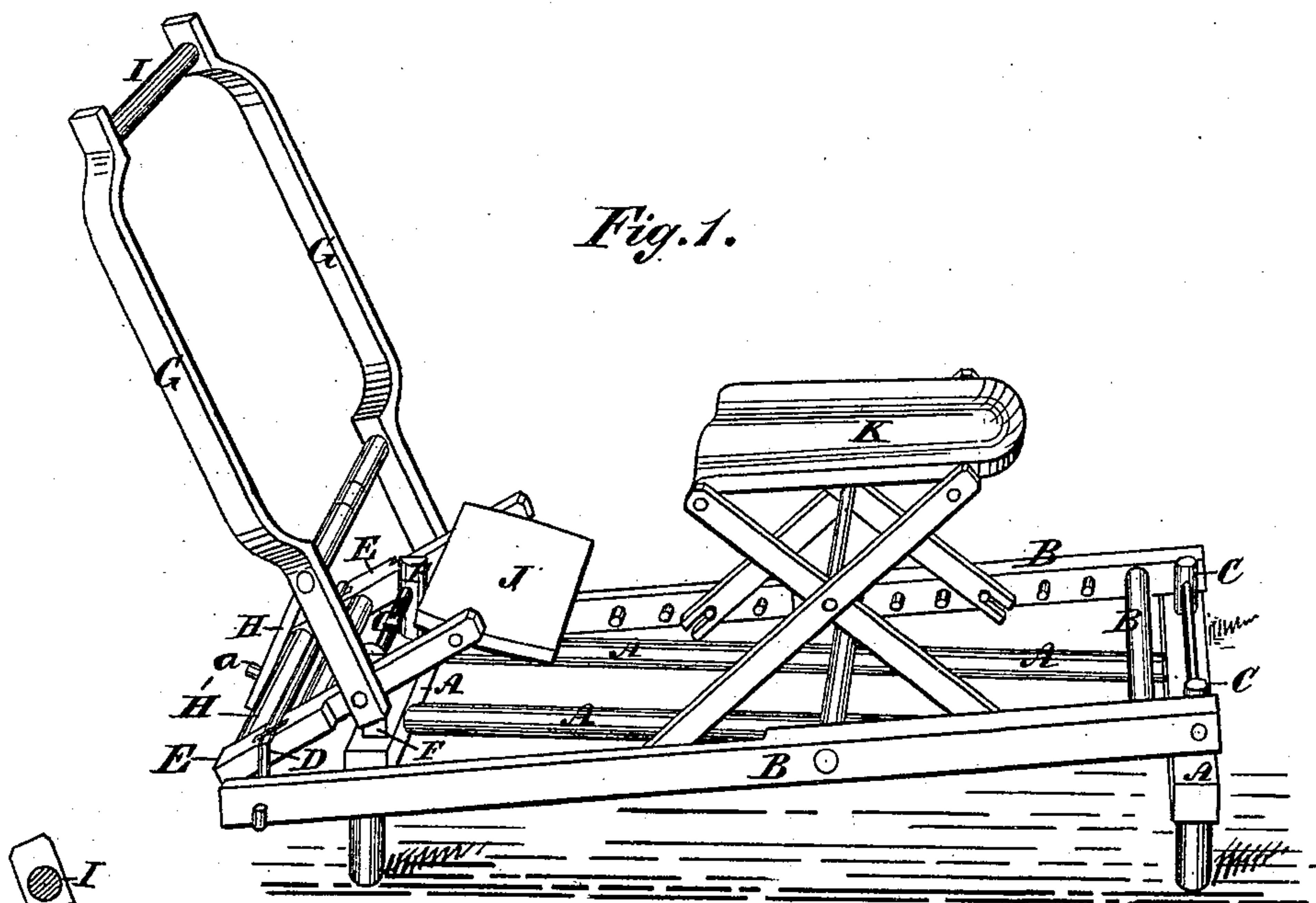


Fig. 1.

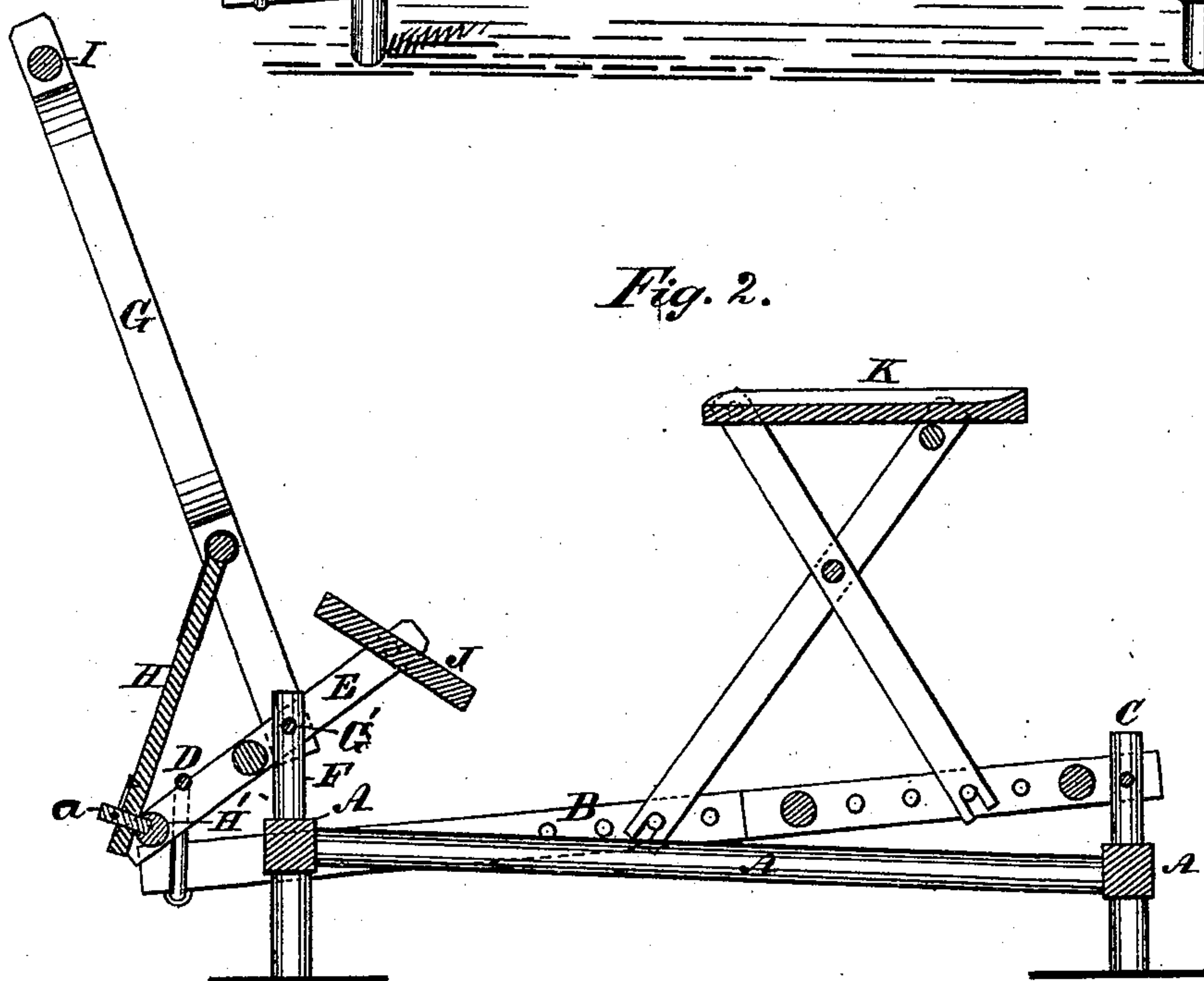


Fig. 2.

Witnesses:
John Grist
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Att'y.

UNITED STATES PATENT OFFICE.

JASPER BATES, OF THORNBURY, ONTARIO, CANADA, ASSIGNOR OF ONE-HALF TO THOMAS McKENNY, OF SAME PLACE.

COMBINED WEIGHT, MANUAL, AND PEDAL POWER APPARATUS.

SPECIFICATION forming part of Letters Patent No. 241,182, dated May 10, 1881.

Application filed March 16, 1881. (No model.) Patented in Canada April 24, 1880.

To all whom it may concern:

Be it known that I, JASPER BATES, of Thornbury, in the county of Grey, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Combined Weight, Manual, and Pedal Power Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention is to impart motive power to machinery; also, to assist hand-labor in the propulsion of a boat, hand-carriages, hand-sleigh, churns, or other forms of labor; and it consists in a combination of frames pivoted together, one of which bears the seat for the sitter, and the other a foot-rest, so that by transferring the weight of the human body from the seat to the foot-board the frames are moved and communicate motive power by connection with the device to be operated.

Figure 1 represents a perspective view of my machine. Fig. 2 is a longitudinal section of the same.

A is a rectangular frame standing on the ground.

B is a rectangular frame of larger size, one end pivoted to posts C fixed in the frame A, and the other end bearing in the bent ends of a bar, D, crossing a frame, E, which is pivoted to posts F F' at the end of frame A by pintle G'.

G is a frame connected vertically to the frame E by brace H, one end of which brace is hinged to the rail H' of frame E, and the other end engages with a pin-projection, a, on rail H' of frame E. The top of the frame G is provided with a hand-rail, I. The frame E is provided with a pivoted foot-board, J, and the frame B is provided with an adjustable seat, K.

The operation of the device is as follows: On the operator seating himself on the seat K his weight will tend to depress the front end of the frame B. The downward movement of the frame is aided by the operator grasping the hand-rail I of frame G and pushing it outward. To secure the return of the frame B the operator will place his foot or feet upon the foot-board J, and by pressing downwardly thereupon and pulling the frame G inward the upper end of the frame E will be drawn down, and its lower end will at the same time bear upward against the under side of the bar D, and thereby raise the front end of frame B. The pintle G', it will be observed, acts as a fulcrum for the frame E in its several movements. The frame B is at its rear end pivoted to the posts C, but is incapable of vertical movement.

The connection of the machinery to be operated may be made with either the frames B, E, or G, as may be convenient, and in any suitable manner.

I claim as my invention—

In a combined manual and pedal power apparatus, the ground-frame A, frame B, pivoted at one end to posts C on the frame A, and bearing at the other end in bent bar D, frame E, pivoted to posts F on frame A, and having foot-board J, frame G, connected to the frame E by hinged brace H, and adjustable seat K, substantially as and for the purpose described.

JASPER BATES.

Witnesses:

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