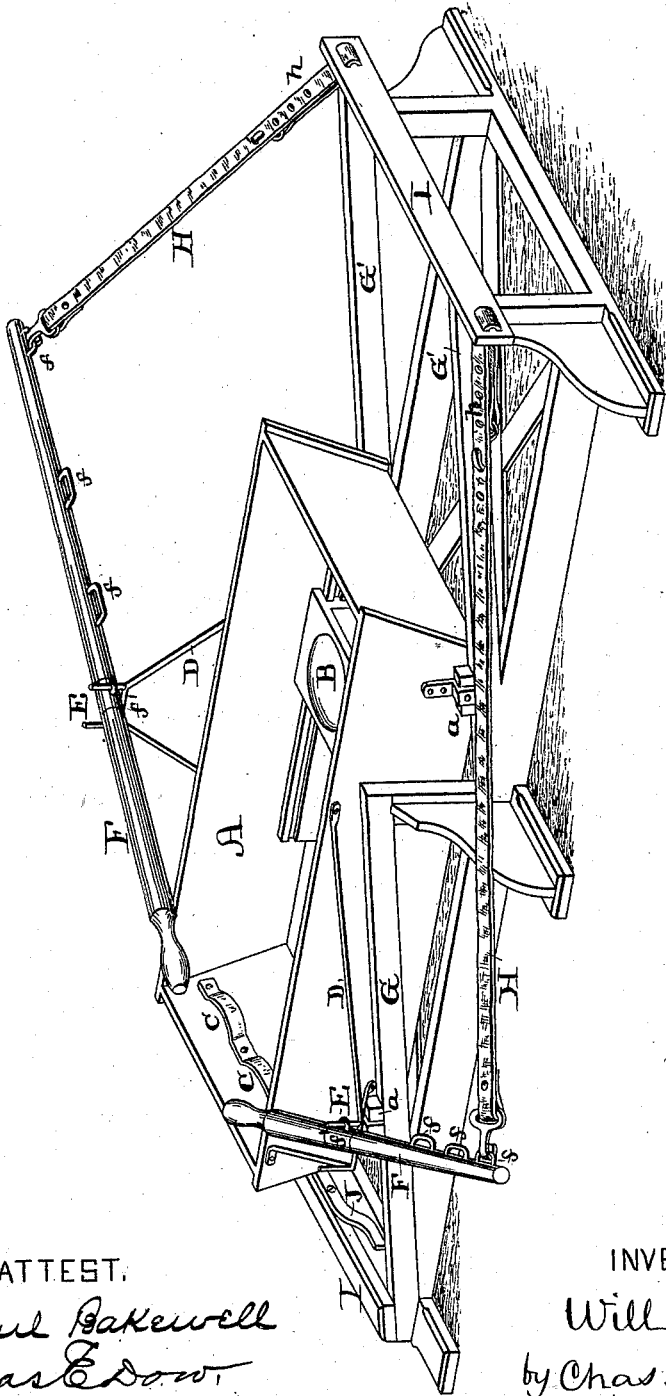


W. J. BRITT.
Exercising-Machine.

No. 209,377.

Patented Oct. 29, 1878.



ATTEST.

Paul Bakewell
Chas. Dowd

INVENTOR.

Will J. Britt.
by *Chas. D. Moody.*
att'y.

UNITED STATES PATENT OFFICE.

WILL J. BRITT, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF HIS RIGHT
TO JAMES M. CHAMBERS, OF SAME PLACE.

IMPROVEMENT IN EXERCISING-MACHINES.

Specification forming part of Letters Patent No. **209,377**, dated October 29, 1878; application filed
February 27, 1878.

To all whom it may concern:

Be it known that I, WILL J. BRITT, of St. Louis, Missouri, have invented a new and useful Improvement in Rowing-Machines, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making part of this specification, where the invention is shown in perspective.

The present invention is an improvement in what are termed "rowing-machines," or constructions for enabling a person to engage in an exercise similar to that in rowing a boat. Its especial advantage is that all the movements of the person in exercising in it are exactly similar to those gone through with in actual rowing.

A represents what may be termed the "boat." It is furnished with a sliding seat, B, foot-holds C C, outriggers D D, oar-locks E E, and oars F F. It is supported and arranged to slide up and down upon a pair of inclined ways, G and G'—that is, the bow of the boat slides upon the forward ways, G', and the stern upon the rear ways, G. The oars at their outer ends, and by means of straps H H, are connected with a fixed part at the front of the machine, and which is preferably the forward end of the frame I, that supports the ways.

The operation is as follows: The person exercising seats himself in the boat, and, taking hold of the handles of the oars, pulls the oars as in a boat on the water. This causes the boat, by reason of the connections H H, to be drawn up the ways, the upward movement continuing until the stroke is completed. As soon, however, as the person moves the oars to recover his stroke, the boat, by reason of gravity, slides down and back on the ways to the starting-point. Another stroke causes the boat to slide upward again on the ways, to again drop back as the handles of the oars are thrown backward, and so on.

A spring, J, is used to cushion the boat as it falls back. The first pair, G, of ways might be extended to take the place of the ways G'; but a double pair of ways, as shown, is much preferable, as by means of them the boat is always kept in a horizontal position. The straps H H are made adjustable as to the points *ff* of their attachment to the oars. As the straps are attached farther in toward the rowlocks, the exercise is made easier.

To suit the different points of attachment to the oars, the straps can be suitably lengthened or shortened at *h h*.

The boat may slide directly upon the ways, but is preferably provided with blocks *a*, that are pivoted to the boat, and slide upon the ways.

The frame I can be lengthened to suit a boat of greater length, and the number of ways suitably increased.

The oars are held in clips *f' f'* to enable them to be feathered.

I claim—

1. The herein-described rowing-machine, consisting of the boat A, oar-locks E E, oars F F, ways G G', and straps H H, substantially as described.

2. The combination, in a rowing-machine, of the boat A and the double ways G and G', for the purpose described.

3. The frame I, provided with the spring J, in combination with the boat A, as and for the purpose described.

4. The boat A, provided with the pivoted blocks *a* and the ways G G', substantially as described.

WILL J. BRITT.

Witnesses:

CHAS. D. MOODY,
J. M. CHAMBERS.