

(No Model.)

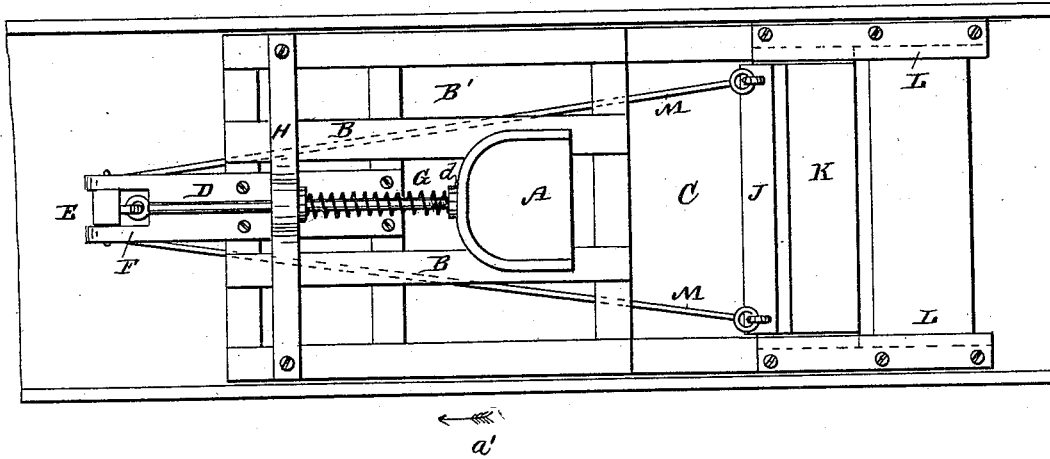
J. J. TURPEL.

SEAT AND FOOT BOARD FOR ROW BOATS.

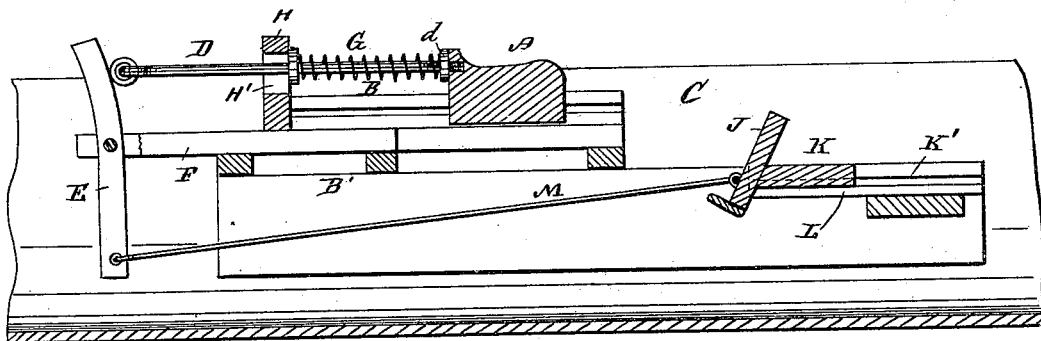
No. 304,474.

Patented Sept. 2, 1884.

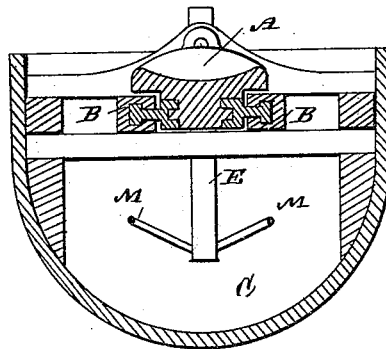
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES J. TURPEL, OF HALIFAX, NOVA SCOTIA, CANADA.

## SEAT AND FOOT-BOARD FOR ROW-BOATS.

SPECIFICATION forming part of Letters Patent No. 304,474, dated September 2, 1884.

Application filed December 5, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES J. TURPEL, of Halifax, in the Province of Nova Scotia and Dominion of Canada, have invented a new and  
5 Improved Seat and Foot-Board for Row-Boats, of which the following is a full, clear, and exact description.

This invention relates to certain new and useful improvements in sliding seats for row-  
10 boats or shells, and has for its object to enable the sculler to recover more rapidly and with less labor than in a boat with the ordinary sliding seat.

The invention consists in a boat constructed  
15 with a sliding seat and a sliding foot-board, which are connected to slide in opposite directions, which seat is combined with a spring to move it forward, and thus facilitate the recovery of the oarsman.

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

Figure 1 is a plan view of part of a boat  
25 provided with my improved sliding seat and foot-board. Fig. 2 is a longitudinal sectional elevation of the same. Fig. 3 is a cross-sectional elevation of the same.

The sliding seat A, of the usual construction,  
30 is held to slide between or on two tracks, B, held longitudinally on a suitable frame, B', in the boat C. A rod, D, projects toward the rear from the seat, and has its rear end pivoted to the upper end of an upright lever, E,  
35 pivoted to a bar, F, projecting from the rear of the frame B'. A spiral spring, G, surrounding the rod D, is held between the rear of the seat A and a cross-piece, H, through an aperture, H', of which the rod D passes.  
40 The foot-board J is secured to a cross-piece, K, held to slide in longitudinal track-grooves K', formed in longitudinal plates L in the boat; or the foot-board can be arranged in any other suitable manner to slide in the direction of the length of the boat. The lower  
45 end of the lever E is connected by rods M with the foot-board. The nut or collar d on the rod D, at the rear of the seat, is to be adjustable along the rod to vary the pressure of  
50 the spring G, as required.

The operation is as follows: If the oarsman makes a stroke, the seat is moved in the direc-

tion of the arrow a' and the spring G is compressed. The rod D is moved in the same  
direction, and by means of the lever E moves  
55 the rods M and the sliding foot-board J in the inverse direction. After the finish of the stroke, when the oarsman recovers, the spring G expands and pushes the seat in the inverse direction of the arrow a', the sliding foot-board  
60 being drawn in the direction of the arrow a'. The oarsman need not pull back the seat after the stroke, and thus can expend all his force and power on the stroke. The recovery is  
65 very rapid, and thus the oarsman is enabled to row very fast in a boat provided with my improved sliding seat and foot-board.

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

1. A row-boat provided with a sliding seat  
70 and a sliding foot-board connected together, and mechanism for causing the said seat and foot-board to automatically return to their normal positions.

2. A row-boat provided with a sliding seat  
75 and with a sliding foot-board, which are combined to move in opposite directions, substantially as herein shown and described.

3. The combination, with a row-boat, of a  
80 sliding seat and a sliding foot-board, a lever swinging in the vertical plane, and connecting-rods for connecting the seat and foot-board with the ends of the said lever, substantially as herein shown and described.

4. The combination, with a row-boat, of a  
85 sliding seat and a sliding foot-board, of a spring for moving the seat forward, and of devices for connecting the seat and foot-board in such a manner that they slide in opposite  
90 directions, substantially as herein shown and described.

5. The combination, with a row-boat, of the  
sliding seat A, the sliding foot-board J, the lever E, the connecting-rods D and M, connect-  
95 ing the ends of the lever E with the seat A and foot-board J, respectively, the spring G, and the cross-piece H, substantially as herein shown and described.

JAMES J. TURPEL.

Witnesses:

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