(No Model.)

J. R. BREESE.

ROLLING SEAT FOR ROW BOATS.

No. 391,939. Patented Oct. 30, 1888.

Fig. 1.

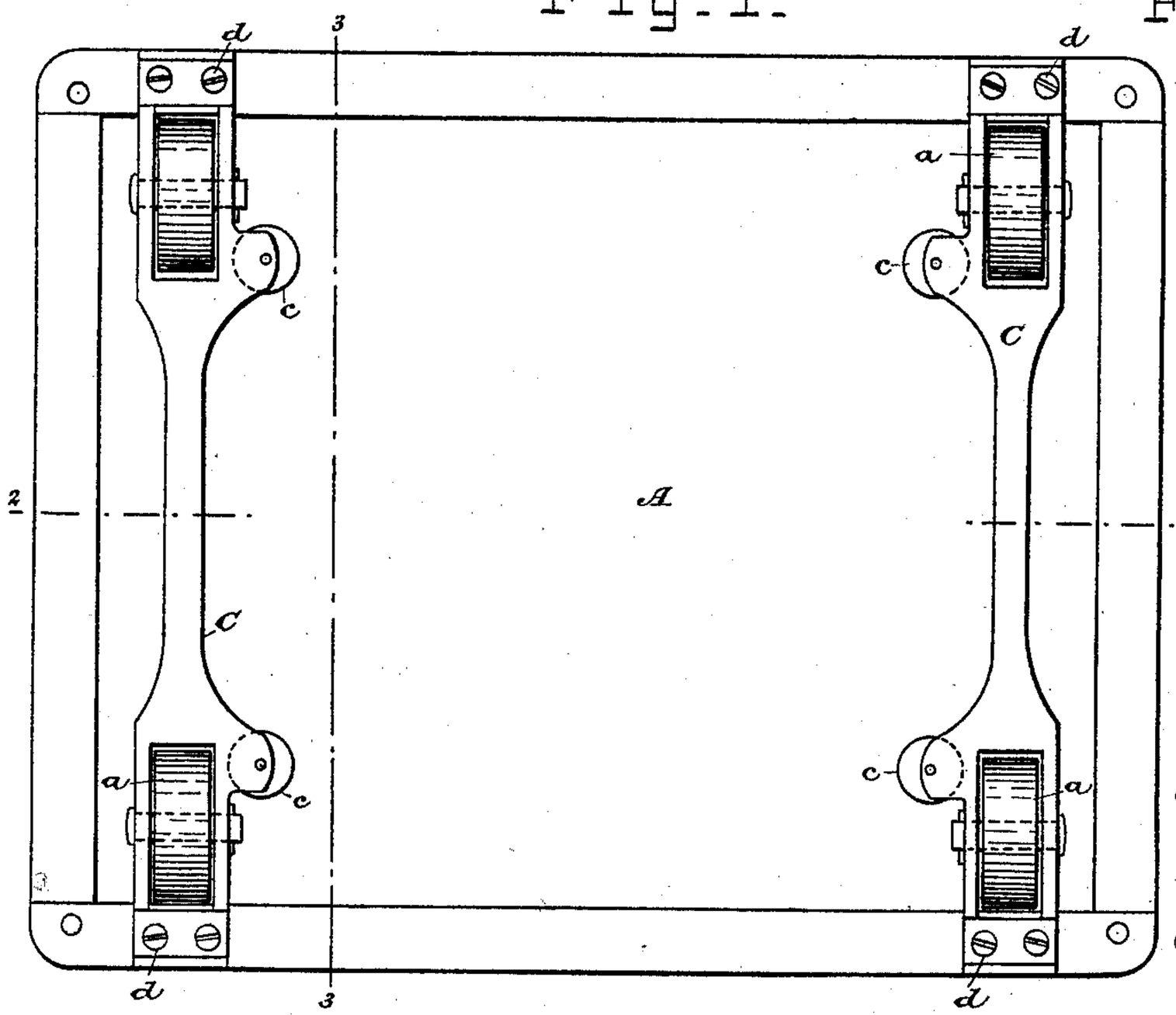


Fig. 3.

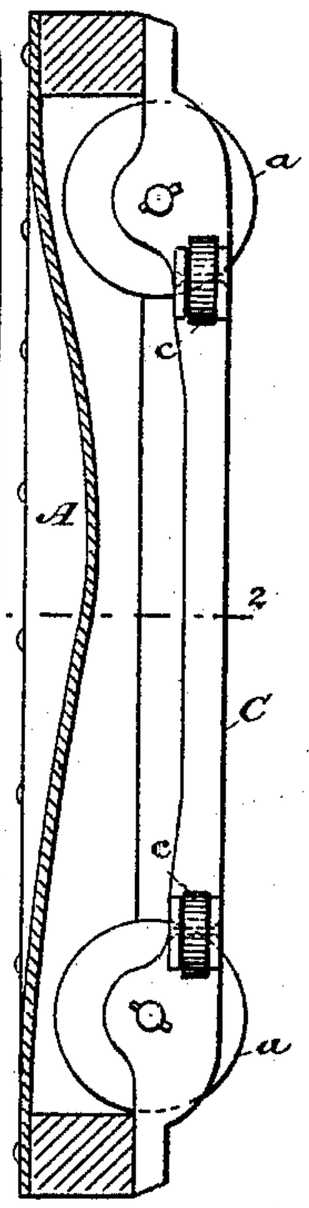


Fig. 2.

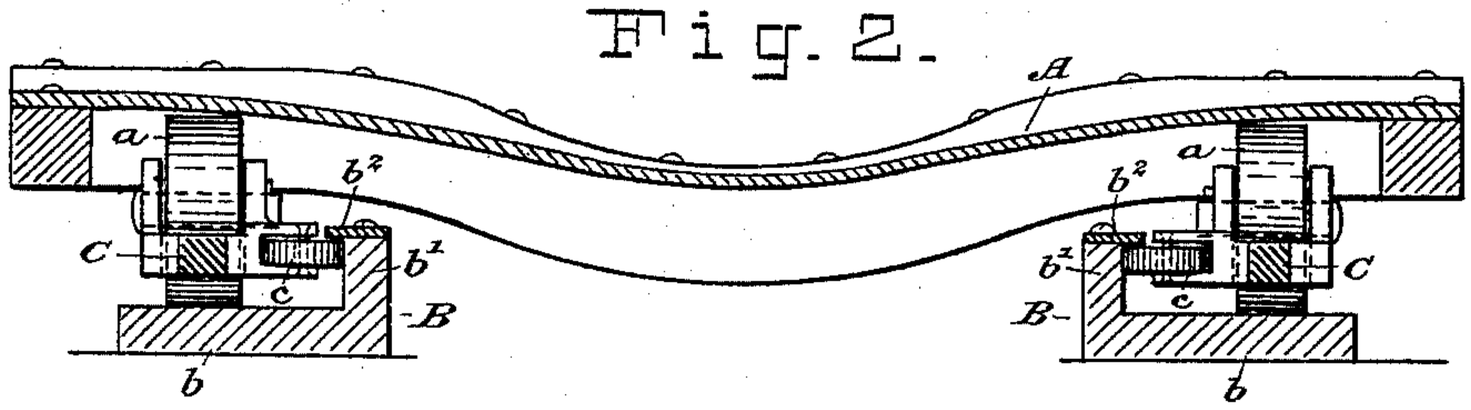


Fig. 4.

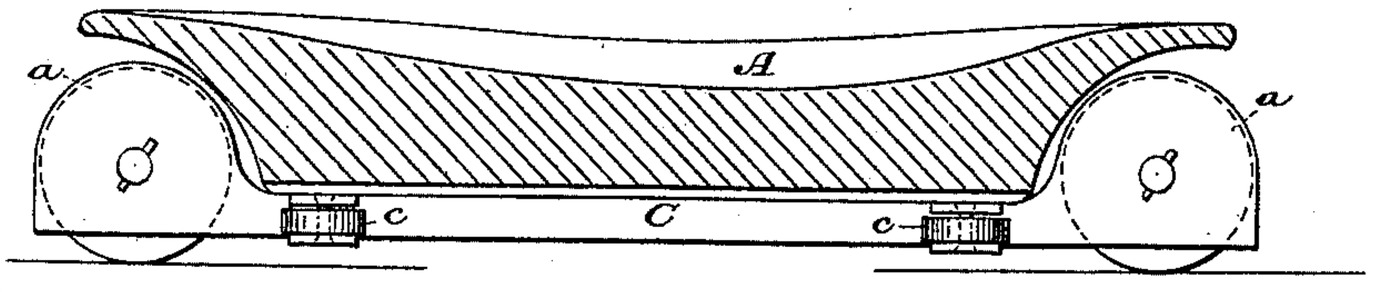
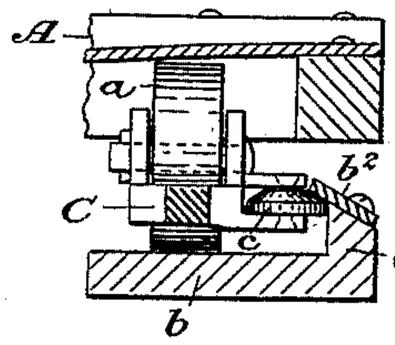


Fig. 6.



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JAMES R. BREESE, OF ELIZABETH, NEW JERSEY.

ROLLING SEAT FOR ROW-BOATS.

SPECIFICATION forming part of Letters Patent No. 391,939, dated October 30, 1888.

Application filed March 23, 1888. Serial No. 268,260. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. BREESE, a citizen of the United States, and a resident of Elizabeth, Union county, New Jersey, have invented certain Improvements in Rolling Seats for Row-Boats, of which the following is a specification.

My invention relates to certain improvements in that class of seats for row-boats or shells which move to and fro fore and aft as the rower plies the oars; and the object of my invention is to provide carrying and bearing rollers for such a seat that shall hold said seat perfectly steady in its movements to and fro, and yet allow it to move or travel noiselessly and with perfect freedom. Seats of this general character have been mounted on wheels with cross-axles; but such seats have not been provided with efficient means for keeping them properly aligned on the tracks, and such a seat vibrates and chafes in its movements, thus creating friction and providing a very unsatisfactory seating for the rower. My improvements obviate this defect.

My invention will be fully described hereinafter, and its novel features carefully defined in the claims.

In the accompanying drawings I have shown what I believe to be the best means of carrying out my invention.

Figure 1 is a plan view of the under side of one known form of rolling seat provided with my improvements. Fig. 2 is a vertical transverse section through the seat and the tracks on which it rolls, the section of the seat being taken along line 2 2 in Fig. 1. Fig. 3 is a vertical section through the seat at right angles to the plane of the section seen in Fig. 2. The plane of this section is indicated by line 3 3 in Fig. 1. Fig. 4 is a sectional view similar to Fig. 3, illustrating the application of my improvements to a seat carved from a solid piece of wood. Fig. 5 is a sectional view illustrating a slight variation in the form of the lateral bearing-roller.

A is the seat on which the rower sits. This seat may be constructed in any way. That illustrated in Figs. 1, 2, and 3 is a wood-framed paper seat, and that represented in Fig. 4 is a solid wooden seat. Both of these are known to the trade.

B B are the tracks mounted in the boat. On these the seat is mounted to roll to and fro. Each track has a base-rail, b, a bearing-rail, b', raised above the base, and an overhanging ledge or strip, b^2, mounted on rail b'.

The seat is provided with four supporting-rollers, $a\ a\ a\ a$, and four lateral bearing-rollers, $c\ c\ c\ c$. The rollers $a\ a$ roll on the base-rails b of the tracks, and the rollers $c\ c$ bear on and roll along the faces of the bearing-rails b' under the projecting ledges or strips b^2.

The supporting-rollers a are mounted on horizontal axes in metal brackets C C, and the bearing-rollers c are mounted on vertical axes in provisions on the inner faces of said brackets. Each bracket C extends across the under side of the seat A from front to rear, and is rigidly secured to the seat by screws $d\ d$, or other equivalent fastening devices. Each bracket bears two rollers, a—one at each end—whereby the four rollers a are made to support the seat at the four corners, and thus give it a firm broad support. Each bracket also has two bearing-rollers, c, mounted on it—one near each of the several rollers a—thus giving to the seat a firm lateral bearing also at two widely-separated points on each rail b'. All of the eight rollers should bear on their tracks at all times, and this can be effected by carefully tramming and aligning the tracks B in the boat. The rollers c travel close in under the overhanging ledge b^2, and almost or quite in contact therewith, whereby the seat is prevented from rising off the track. This device also prevents the seat from dropping out in lifting or inverting the boat or in case of accident. Stops will be provided, as usual, at the ends of the track-rails to limit the travel of the seat; but these I have not deemed it necessary to show.

Fig. 4 merely shows the application of my improvements to a seat carved from wood. The only difference between this construction and that seen in Fig. 3 is in the form of the bracket C, whereby it is the better adapted to the special form of seat illustrated.

In the several Figs. 1, 2, 3, and 4 the rollers c are represented as cylindrical in form, their upper faces presented to the projecting ledges b^2 being planes at right angles to the roller-axes; but this face of the roller c may be

beveled or coned, as seen in Fig. 5, the ledge b^2 being set inclined to correspond to this beveled bearing-face of the roller. In this figure I have also shown the bearing-rollers and rail arranged exteriorly to the rollers *a*, as they may be. I prefer, however, the arrangement illustrated in Fig. 2.

The tracks B may be of wood or other suitable material.

Having thus described my invention, I claim—

1. The combination, with the tracks, constructed substantially as described, of the seat for a row-boat, provided with supporting-rollers *a a* on horizontal axles, and the four bearing-rollers *c c* on substantially vertical axles, said rollers bearing on their respective track-rails, as set forth.

2. The combination, with the tracks, constructed substantially as described, of the seat A, the brackets C C, secured to the under side of the said seat, and each provided with bearings at their ends for the supporting and bearing rollers, the supporting-rollers *a a*, mounted on horizontal axles, and the bearing-rollers *c c*, mounted on vertical axles, substantially as set forth.

3. The combination, with the tracks B, each consisting of a base-rail, *b*, a bearing-rail, *b'*, and an overhanging ledge, b^2, of the seat A, the four supporting-rollers *a a*, one near each corner of said seat, and the four bearing-rollers *c c*, one near each corner of said seat, said rollers *c* bearing on the tracks *b'* directly under the ledges b^2, as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES R. BREESE.

Witnesses:
HENRY CONNETT,
T. D. CAPLINGER.