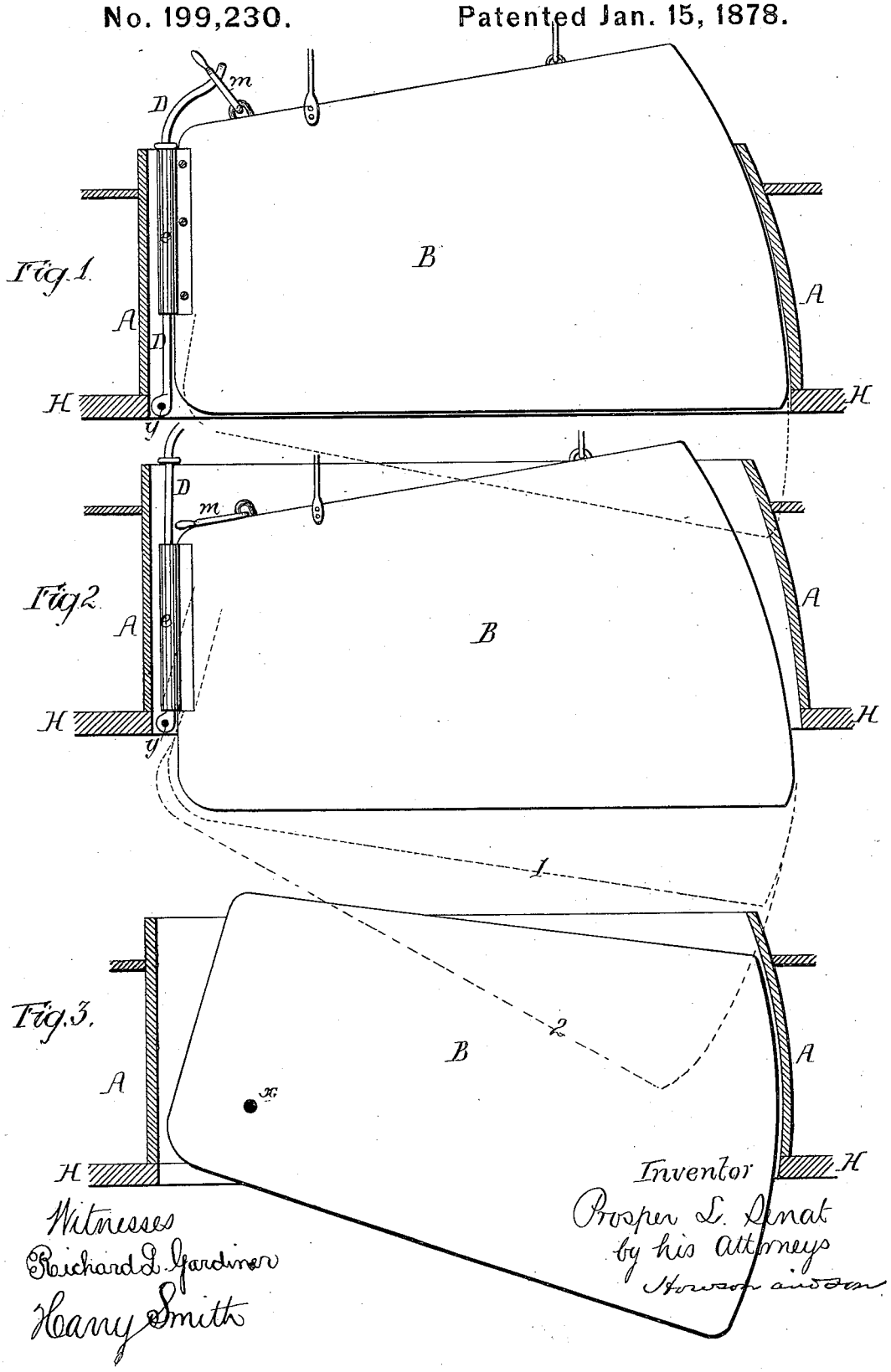
P. L. SENAT.

Center-Boards for Vessels.

No. 199,230. Patented Jan. 15, 1878.



Witnesses
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UNITED STATES PATENT OFFICE.

PROSPER L. SENAT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CENTER-BOARDS FOR VESSELS.

Specification forming part of Letters Patent No. **199,230**, dated January 15, 1878; application filed July 2, 1877.

To all whom it may concern:

Be it known that I, PROSPER L. SENAT, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Center-Boards for Vessels, of which the following is a specification:

The object of my invention is to so connect a center-board to a vessel that a greater area of the board can be exposed below the keel in sailing in shallow water, or when the boat is under unusual press of canvas, than of an ordinary board, connected to the vessel in the usual manner.

In the accompanying drawing, Figure 1 is a section of part of the hull of a vessel, showing the center-board elevated; Fig. 2, the same with the center-board in a different position; and Fig. 3, a view showing a center-board hung in the usual manner.

A is the usual center-board well, extending longitudinally and vertically through the keel H; and B is the center-board, which is generally hinged permanently at *x* to the casing of the well, at a point above the bottom and some distance from the front edge, so that it can be lowered only in the manner indicated by full lines in Fig. 3. Hence in sailing in shallow water it will be impossible, in many cases, to have a sufficient area of board below the keel to avoid leeway or give the vessel desired stability under press of canvas. In order to obviate this difficulty I hinge the lower end of a guide-rod, D, to the keel of the boat at the extreme front end of the well, at the point *y*, and so connect one end of the center-board to this rod by a sleeve, *e*, or its equivalent, capable of sliding on the said rod, that the board can be lowered, as shown in full lines in Fig. 2, on comparing which with Fig. 3 it will be observed that, although the board in the latter figure projects downward from the keel about twice as far as the board in Fig. 2, the latter presents quite as much or more area below the keel as the former.

If the board be depressed to the position shown by plain lines in Fig. 2, and then turned with the rod D on its hinge *y* to the position shown by dotted line 1, so that it shall project below the keel to the extent shown in Fig. 3, there will be a much greater area of board below the keel in Fig. 2 than in Fig. 3. Dotted line 2 shows the board fully down.

When the board is elevated it may be attached, by a chain or link, *m*, to the upper hooked end of the rod D, in which case it serves the purpose of an ordinary center-board, with this advantage, that it is hung at the extreme lower corner of the front of the well, so that it swings from this point, the portion of the center-board below the keel extending from a point nearer the front end of the well than does that of the center-board hung in the usual manner, as in Fig. 3. When sailing in shallow water or under a stress of canvas, however, the board may be disconnected from the upper end of the rod, and may be lowered to the position shown by plain lines in Fig. 2, or, if the depth of water will permit it, to the positions shown by dotted lines in said figure.

I claim as my invention—

The center-board B, hung to, but capable of sliding upon, the pivoted rod D, all substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PROSPER L. SENAT.

Witnesses:

HERMANN MOESSNER,

HARRY SMITH.