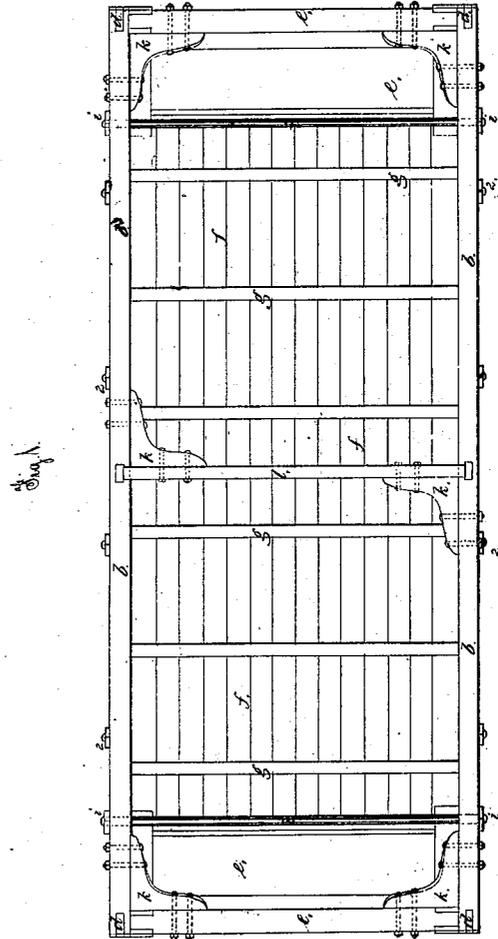
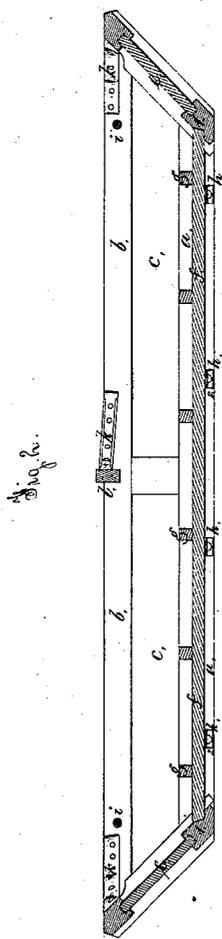
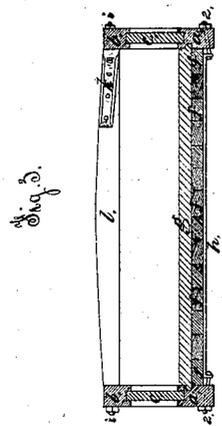


No. 40,539.

PATENTED NOV. 3, 1863.

E. HARRISON.
PONTON BOAT.



No 40,539.

Witnesses.

Wm. W. Keen

Enoch Harrison

UNITED STATES PATENT OFFICE.

ENOCH HARRISON, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
EDWARD W. SERRELL, OF SAME PLACE.

IMPROVED PONTON-BOAT.

Specification forming part of Letters Patent No. **40,539**, dated November 3, 1863; antedated
October 29, 1863.

To all whom it may concern:

Be it known that I, ENOCH HARRISON, of the city and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Scows and Ponton-Boats; and I do hereby declare the following to be a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a plan of said boat. Fig. 2 is a longitudinal section of the same, and Fig. 3 is a cross-section.

Similar marks of reference denote the same parts.

Pontons have heretofore been made to put together in sections, but difficulty has heretofore existed in making such boats sufficiently light for transportation.

The nature of my said invention consists in a peculiar construction of flat-bottomed boat or scow adapted to the embarkation or debarkation of troops, supplies, ordnance, &c., or for forming the floats of a ponton-bridge, I make use of removable side and end pieces and a bottom composed of separate plank clamped together, so that my boat can be taken apart and moved in sections or in detail, and can be put together very quickly and made water-tight.

In the drawings, *a* represents the sill-piece of the side, and *b* the gunwale between which a panel or panels, *c*, is introduced, and the parts *a* and *b* are connected by diagonal pieces *d* coming at the ends of the boat. The end pieces of the boat are formed as a paneled frame, *e*, with a rabbet at *l*, receiving the ends of the floor-plank *f f*.

g g are timbers or thwarts entering with a tongue into mortises in *a*.

h h are metal straps across beneath the bot-

tom, with bolts 2 2 passing through holes in the sills *a a*.

The straps *h h* in putting the boat together are to be laid down at suitable distances apart; then the floor-plank are laid together, having previously been planed up true; then the ends of the boat are put in place, the floor-plank resting in the rabbets *l l*; then one of the sides is put on and the bolt 2 passed through its holes in the sill *a*, and then the thwarts *g g* are put in place and the other side attached by the bolts 2 2, and by screwing up the said bolts tightly the bottom will be thoroughly compressed and held together. A strip of india-rubber may be introduced between *d* and the end pieces of the boat. *i i* are bolts applied to draw the upper parts of the sides together at the ends and bind them against such end pieces, and *k* are knees introduced to strengthen the corners, and *l* is a cross-timber to sustain the sides of the boat near the middle.

It will be evident that this boat can be taken apart or put together with great facility, and that it can be easily transported or when not in use can be packed away in safety instead of being left, as now usual, either in the water or exposed under circumstances that speedily effect its destruction.

What I claim, and desire to secure by Letters Patent, is—

The mode of retaining the floor-planks beneath the thwarts *g g* by the metallic straps *h h* and bolts 2 2, in combination with the removable side and end pieces of the boat, as set forth.

In witness whereof I have hereunto set my signature this 1st day of April, 1863.

Witnesses: ENOCH HARRISON.

THOS. GEO. HAROLD,
LEMUEL W. SERRELL.