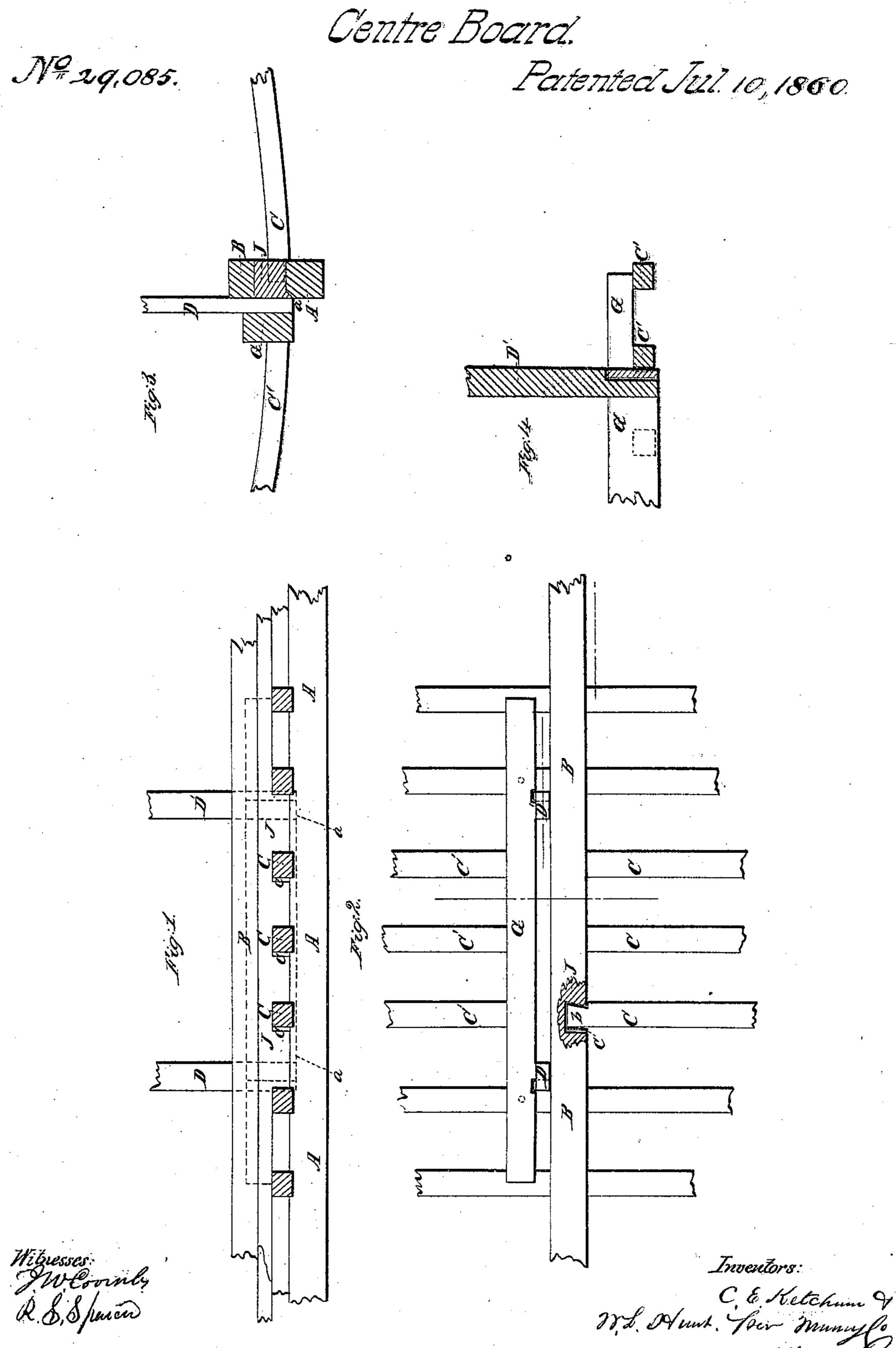
## Setchum & Hunt. Centre Roard



## UNITED STATES PATENT OFFICE.

C. E. KETCHUM AND W. L. HUNT, OF PORT JEFFERSON, NEW YORK.

CONSTRUCTION OF CENTERBOARD VESSELS.

Specification of Letters Patent No. 29,085, dated July 10, 1860.

To all whom it may concern:

Be it known that we, C. E. Ketchum and W. L. Hunt, both of Port Jefferson, in the county of Suffolk and State of New York, 5 have invented a new and useful Improvement in the Construction of Centerboard Vessels; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the ac-10 companying drawings, making a part of this

specification, in which—

Figure 1, represents a longitudinal sectional elevation of the timbers amidship, showing the keel, keelson-log, and keelson 15 with a section taken through the transverse floor timbers, that are half dove-tailed into the keelson-log. Fig. 2, a top view of Fig. 1, showing the manner of fastening into the keelson-log, the flooring timbers. Fig. 3, an 20 athwartship view of Figs. 1 and 2; this section is taken through Fig. 2, as indicated by the red line x, x. Fig. 4, a vertical longitudinal section taken through one trunk-post and two floor timbers, as indicated by the 25 red line y, y, Fig. 2.

Similar letters of reference indicate corresponding parts in the several figures.

Our invention consists in interposing a solid timber, which we shall term the keel-30 son - log filling, between the keel and keelson so as to completely fill up the space usually left between these two timbers, as will be hereinafter described, said keelson filling is seated on the keel in such a way 35 that the calking can be done from the outside of the vessel before both sides of the outer planking are put, as will be described.

To enable those skilled in the art to fully understand our invention we will proceed to 40 describe its construction and operation.

The drawings represent only those parts of a vessel's frame that are intimately connected with the part we desire to improve; the vessel is otherwise constructed in the 45 manner well known to shipwrights.

A represents the keel, and B the keelson, which extend in an unbroken line from stem to stern of the vessel, and to which the stem and stern posts are secured. The keel and 50 keelson are made of solid pieces of timber, or they may be made of separate pieces properly scarfed together. The keelson B, is

raised a sufficient distance above the keel A, to admit the ends of floor timbers C, C, with a reserved space above these timbers for 55

the purpose hereinafter described.

The head and tail posts D, D', are now set, one on each side of the keelson B, extending down to the seam of the keel, as shown in the drawings Figs. 1, 3 and 4; and on the 60 outside of these perpendicular posts D, D', is secured the trunk-log G, that extends a short distance beyond the posts D, D', fore and aft, into which timber (G) the ends of the floor timbers C', C', are secured. The 65 trunk or boxing (not shown in the drawings) is now built up by nailing the boards on each side of the head and tail posts D, D', and suitably calking the joints, a space is thus left between the side boards forming 70 the trunk by the side of the keel and keelson for the center board. Now instead of cutting out a large portion of wood of the keelson B, in order to let into it a plank to close up the way between the keelson B, and keel 75 A, we interpose a solid piece of timber J, that completely fills up the space under the keelson, which piece extends out both sides from the trunk posts D, D', any suitable distance. This keelson-log J, is seated 80 snugly on the keel A, and rabbeted down to it, in the manner shown in Fig. 3, so that the inside seam a, will be even with the bottom of the trunk-log G, the seam will thus be exposed, before the planking is put on, 85 and the calking may be done from the outside of the vessel. The floor timbers C, C, are now secured into the keelson-log J, by half dovetail joints b, (see Fig. 2) and wedge keys c; the floor timbers in this man- 90 ner are all secured into solid timber on each side of the trunk or center board space which will add greatly to the strength of the hulls of center board vessels.

What we claim as new, and desire to se- 95

cure by Letters Patent is,

The keelson-log J, introduced between the keel and keelson, substantially in the manner, and for the purposes herein set forth.

CORNELIUS E. KETCHUM. W. L. HUNT.

Witnesses:

BRYANT L. NORTON, JOHN L. DARLING.