

I. H. HIGGINS & A. T. GIFFORD.

CONSTRUCTION OF BOATS.

No. 185,919.

Patented Jan. 2, 1977.

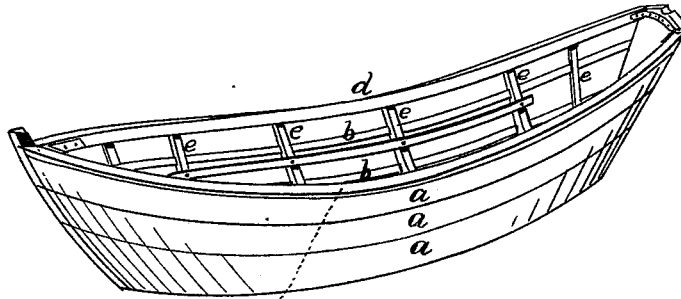


Fig. 1.

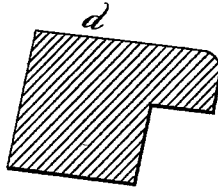


Fig. 4.

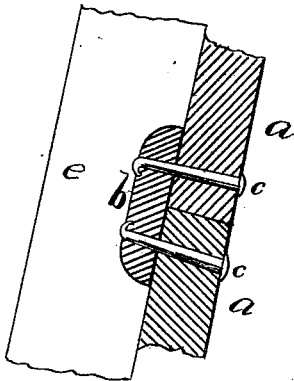


Fig. 2.

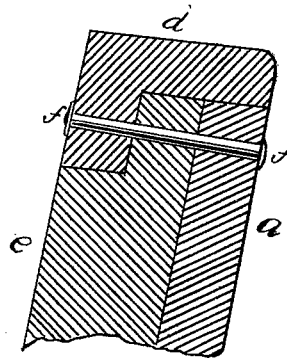


Fig. 3.

WITNESSES

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# UNITED STATES PATENT OFFICE.

ISAAC H. HIGGINS AND ASA T. GIFFORD, OF GLOUCESTER, MASS.

## IMPROVEMENT IN CONSTRUCTION OF BOATS.

Specification forming part of Letters Patent No. **185,919**, dated January 2, 1877; application filed November 20, 1876.

### *To all whom it may concern:*

Be it known that we, ISAAC H. HIGGINS and ASA T. GIFFORD, both of Gloucester, in the county of Essex and State of Massachusetts, have invented a new and valuable Improvement in Dories; and we do hereby declare that the following is a full, clear, and exact specification thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The first part of our invention relates to the sides of the dory, and consists in building them "set-work," the seams being covered and protected by battens upon the inside. This absolutely prevents leakage, which is the constant difficulty with the common lap dory.

The second part of our invention relates to the peculiarly constructed gunwale below described, and to its combination with the timbers or knees.

In the accompanying drawing, Figure 1 is a view, in perspective, of a dory embodying our invention. Fig. 2 is a transverse vertical section of portions adjoining of two strakes and the batten upon the inside. Fig. 3 is a transverse vertical section of the gunwale, the upper portion of the side, and one of the timbers, showing the method of fastening and the shape of the different parts. Fig. 4 is a section of the gunwale between the timbers or knees.

Similar letters of reference indicate corresponding parts.

*a a* represent the strakes forming the sides of the dory. These, in dories, are usually made to lap, and are extremely liable to leak, and difficult to repair. In this invention the sides are built set-work, and the battens *b*, held in place by means of nails *c c*, are placed

over the seams inside. By this means leakage is practically done away with, and the work of repairing is very much simplified, as will be apparent when it is remembered that the boards do not lap. *d* is the gunwale.

The ordinary method of constructing dory-boat gunwales is to attach a piece inside at the top part of the side of the boat, and then to cover such piece, and also the edge of the side, with caps. These caps are in several pieces. Our improved gunwale is of a single piece, requires no top strip, and is of the shape shown in Fig. 4 in the drawing. The additional strength of such a gunwale is evident. The timbers or knees *e e* are mortised into the gunwale and a rivet, *f*, passing through the strake *a*, tenon of the timber, and gunwale, securely holds them together, as will be seen in Fig. 3.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A dory having its sides built "set-work," and having its seams protected by means of battens, for the purpose of preventing leakage.

2. In a dory a gunwale, made in a single piece, and of substantially the shape shown in Fig. 4, for the purpose specified.

3. In combination with the gunwale *d* and side or strake *a*, the timber or knee *e*, mortised into said gunwale, and held in place by means of the rivet *f*, substantially as and for the purpose hereinbefore set forth.

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Witnesses:

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