

(No Model.)

E. E. FERRIN.

MEANS FOR VENTILATING THE HULL OF A NAVIGABLE VESSEL.

No. 313,066.

Patented Mar. 3, 1885.

Fig. 1.

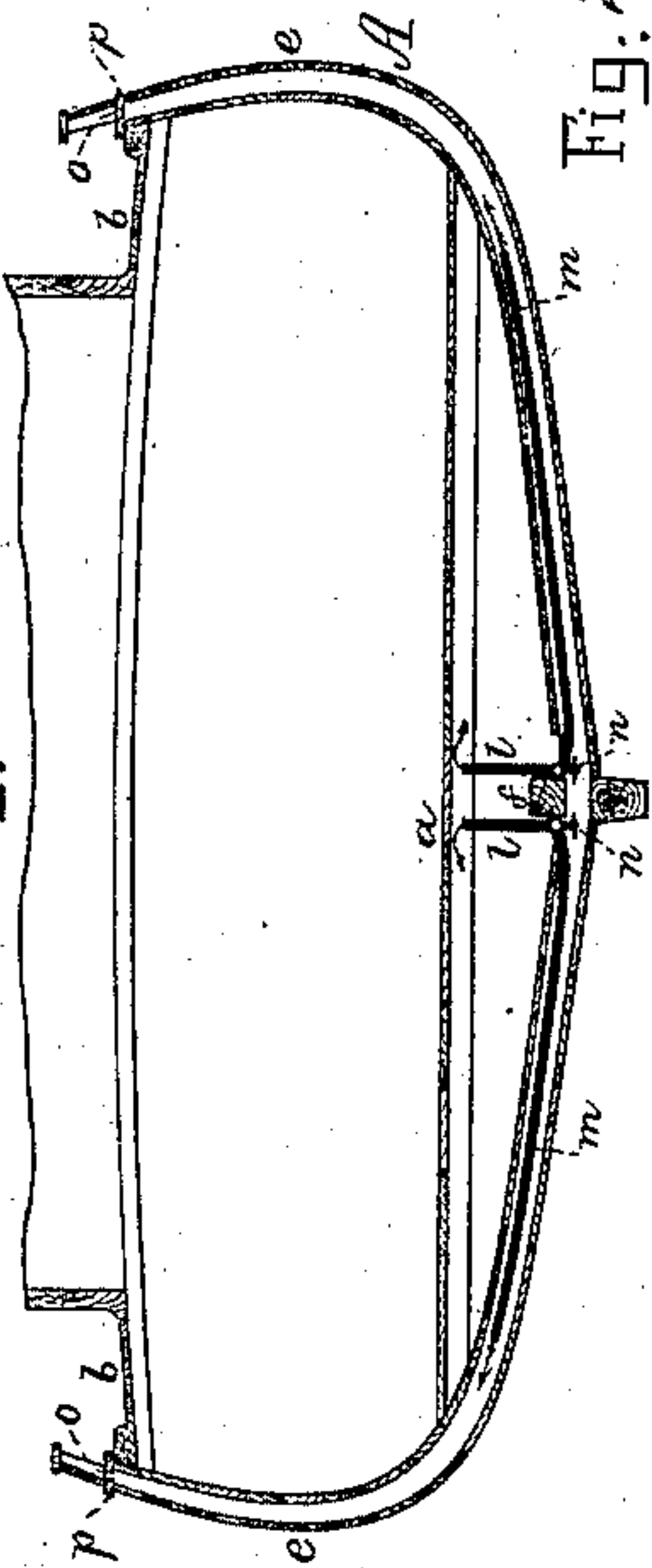


Fig. 2.

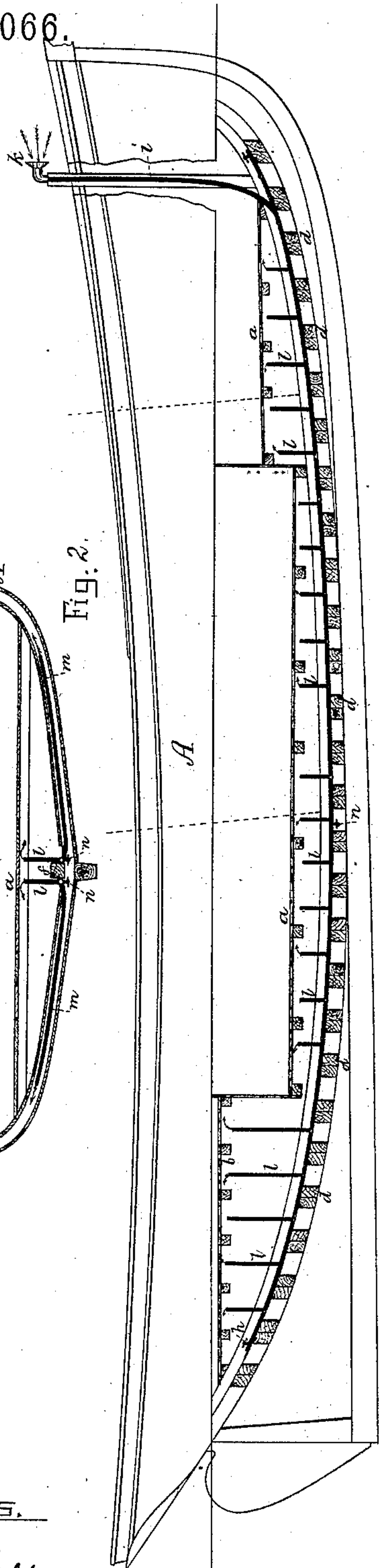
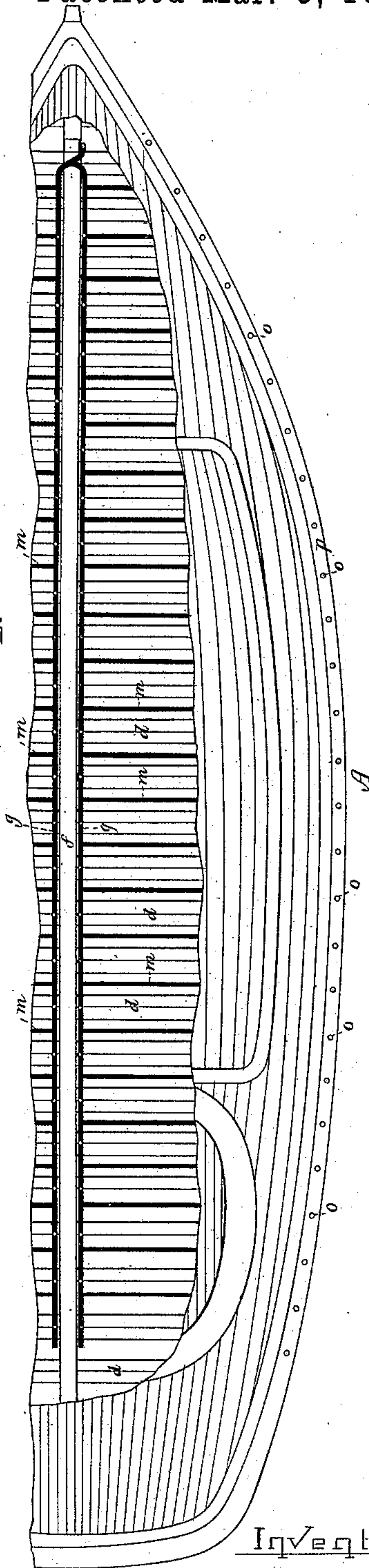


Fig. 3.



Witnesses.

S. N. Piper
E. D. Pratt

Inventor.

Eaton E. Ferrin

by R. H. Eddy atty.

UNITED STATES PATENT OFFICE.

EATON EVERETT FERRIN, OF BEVERLY, MASSACHUSETTS.

MEANS FOR VENTILATING THE HULL OF A NAVIGABLE VESSEL.

SPECIFICATION forming part of Letters Patent No. 313,066, dated March 3, 1885.

Application filed October 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, EATON EVERETT FERRIN, of Beverly, in the county of Essex, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Means for Ventilating the Hull of a Navigable Vessel; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a transverse section; Fig. 2 a longitudinal section, and Fig. 3 a top view of a yacht-hull provided with my invention, the nature of which is defined in the claim hereinafter presented. In this last-named figure the deck and flooring are shown as partly removed in order to represent the arrangement of the ventilating-pipes with the parts below such flooring.

My said invention is to effect ventilation of not only the spaces below the floorings, but those between the timbers of the frame of the hull, such being not only for sanitary purposes, but to dissipate moisture and prevent decay of the said flooring and timbers.

In the drawings, A denotes the hull of a yacht, in which *a* is the flooring within such hull, *b* the ceiling, *d* the ribs, *e* the outer planking, and *f* the keelson.

In carrying out my invention as represented, there are extended along the keelson on its opposite sides two main pipes or conduits, *g*, opening into each other at the bow and closed at their after ends or open and there provided with stop-cocks, one of which is shown at *h* in Fig. 2. At the bow of the hull there is a pipe, *i*, that opens at its lower end into the main pipes *g*, and at top is provided with a wind-sail or a fixed or rotary trumpet-mouth, *k*, such pipe extending some or a suitable distance above the deck or rail. From each of the main pipes *g* branch pipes *l* open, and are led upward nearly to the flooring, each of such branch pipes being open at its upper end. Furthermore, from each of such main pipes *g* other branch pipes, *m*, open, and are led up within the spaces between the ribs, the ceiling, and the planking, and open into such spaces. In each of the main pipes at its lowest part is a faucet, *n*, for discharge of any water that may get into the pipe.

When the vessel or hull may be at sea, or moving through the water, air will be received into and drawn down through the pipe *i* and from thence into the main pipes, and from thence into and through the two series of branch pipes and into the spaces beneath the flooring and between the ribs and the ceiling and planking of the hull, from which such air is to escape by a series of holes or passages, *o*, extending through the plank sheer *p* or made to open above the deck from the spaces between the ribs and the ceiling and planking. By such means the lower parts of the hold and the spaces between the ribs where foul air and moisture are liable to accumulate become readily ventilated.

I do not claim, broadly, pipes arranged about the keelson and sides of a vessel and communicating with an induction-pipe extending above the deck and provided with means of forcing air into it, such being as described and represented in the United States Patents Nos. 22,827, 120,108, 233,748, and in the British Patents No. 3,339 of 1880, 278 of 1859, 3,234 of 1876, 1,883 of 1871, and 535 of 1863; but

I claim—

In combination with the hull of a navigable vessel, two main pipes arranged along the keelson, closed or having stop-cocks at their rear ends and opening into each other at their front ends, two series of branch pipes leading out of such main pipes into spaces between the ribs, ceiling, and planking, an induction-pipe leading from the junction of the two main pipes to, through, and above the deck or rail, and having at its upper end a suitable mouth-piece or means of introducing air into it, (the said induction-pipe,) and a series of openings leading from the aforesaid spaces through the deck or plank sheer, each of such main pipes having in its lower part a faucet, and all being substantially and for use as set forth.

EATON EVERETT FERRIN.

Witnesses:

R. H. EDDY,
E. B. PRATT.