F. DASSORI.

Ceiling for Grain-Vessel.

No. 196,338. Patented Oct. 23, 1877.

Fig. 1

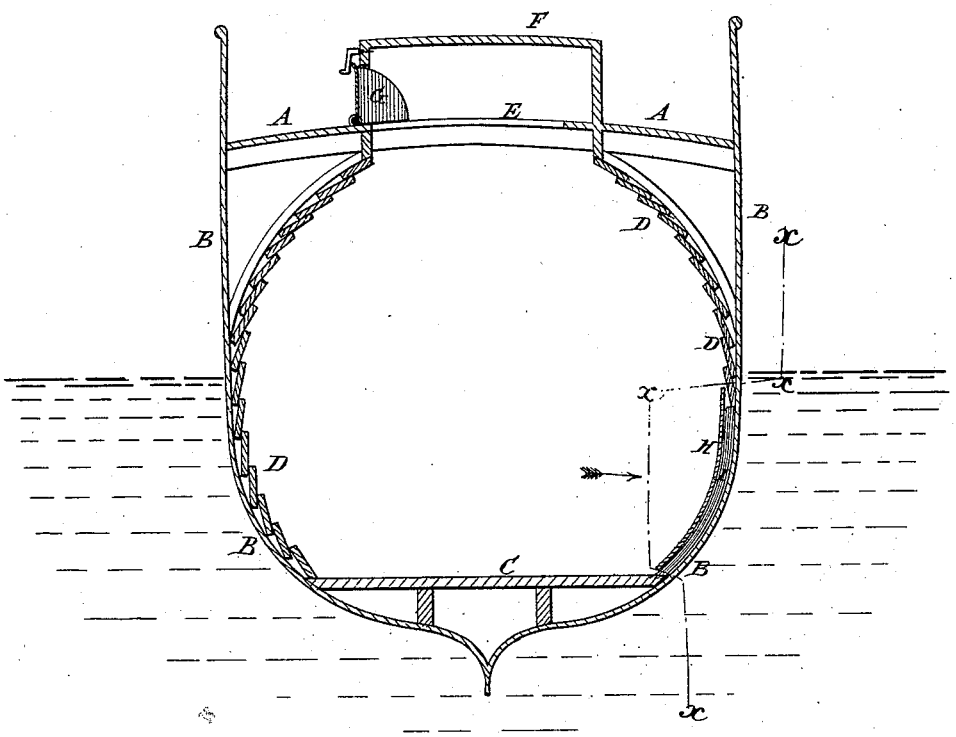
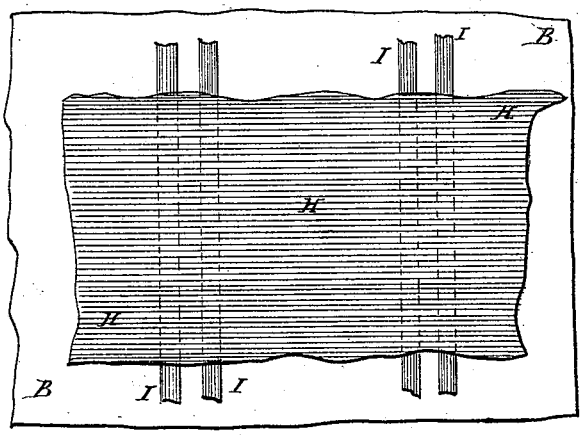


Fig. 2



WITNESSES:

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FREDERICK DASSORI, OF NEW YORK, N. Y.

IMPROVEMENT IN CEILINGS FOR GRAIN-VESSELS.

Specification forming part of Letters Patent No. **196,338**, dated October 23, 1877; application filed September 10, 1877.

To all whom it may concern:

Be it known that I, FREDERICK DASSORI, of the city, county, and State of New York, have invented a new and useful Improvement in Ceiling Vessels for Grain, of which the following is a specification:

Figure 1 is a vertical cross-section of a vessel to which my improvement has been applied. Fig. 2 is a detail inner side view of a portion of the same, as indicated by the line *x x x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to improve the construction of vessels for carrying grain in bulk, so as to make them safer, better protect the cargo from damage or loss, and at the same time enable the vessels to carry more grain.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

A represents the deck. B represents the sides or hull of the vessel, and C represents the floor. The sides B of the vessel may be ceiled from the floor to about the water-line with planks D, in the usual way. From about the water-line the ceiling D is carried inward in a curve or arch, till it meets the deck A at or near the sides of the main hatchway E, as shown in Fig. 1.

By this construction the center of gravity of the cargo will be kept in the middle part of the vessel, so that the cargo cannot shift to turn the vessel upon her beam ends, however much she may roll.

To still farther assist in effecting this result, a hopper, F, is secured in the main hatchway E, which is designed to be kept full of grain from the fore and aft compartments, so that the main hold will always be kept full.

The hopper F should be provided with a spout, G, in its side for convenience in putting in grain. From about the water-line to the floor, the sides of the vessel are covered with mats, oil-cloth, rubber cloth, asbestus, felt, or other suitable material, H, to prevent the grain from sifting through the ceiling into the sides and bottom of the vessel, wasting the grain, and choking the pumps. The lining of mats or cloth H may be used without a ceiling beneath it, if desired. Beneath the mats or cloth H are placed strips I, of wood, arranged in pairs at a little distance from each other, as shown in Fig. 2, to form ways or channels to conduct any water that may find its way in down to the bottom and well of the ship.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A vessel for carrying grain in bulk, in which the ceiling D is carried up in a curve or arch from about the water-line to the deck, at or near the sides of the main hatchway, substantially as herein shown and described.

2. The combination of cloth H with subjacent strips and superposed arch, to form a channel for ventilation and escape for water, as specified.

FREDERICK DASSORI.

Witnesses:

JAMES T. GRAHAM,

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