(No Model.)

T. PRICE.

VENTILATOR FOR LIGHTERAGE SCOWS.

No. 463,816. Patented Nov. 24, 1891.

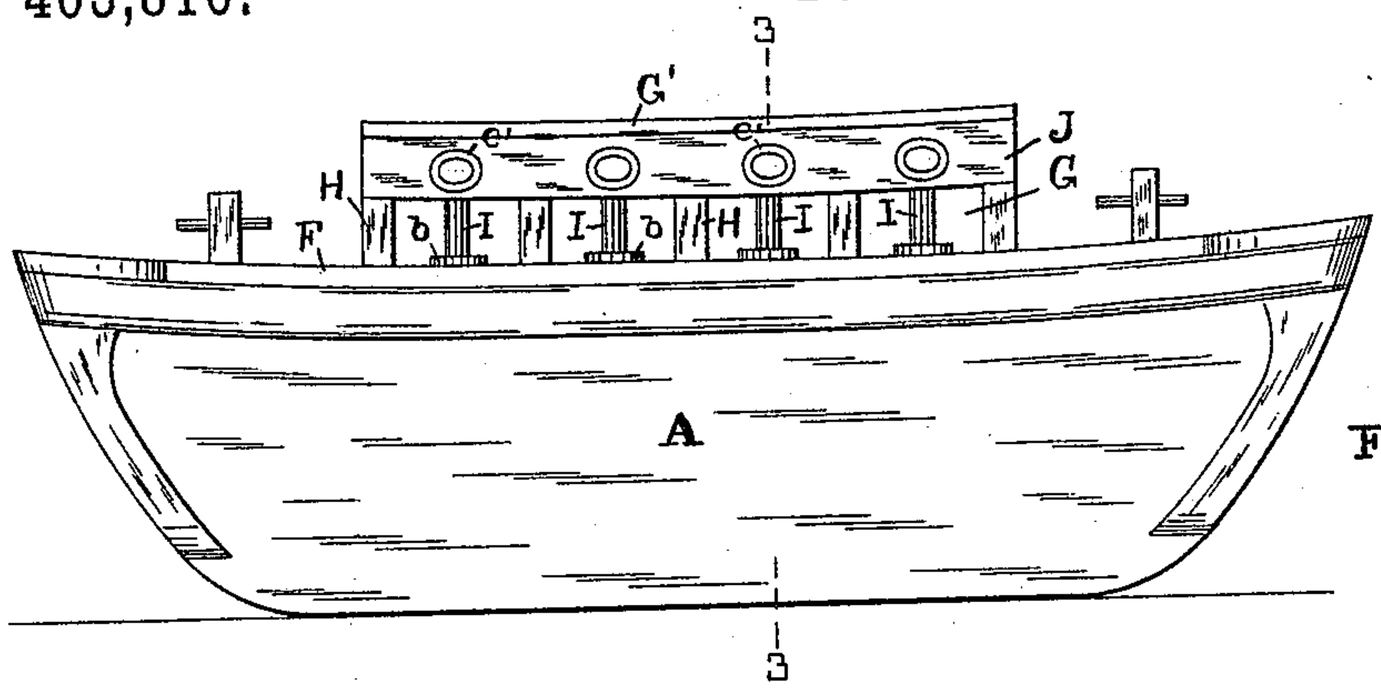

Fig. 1.

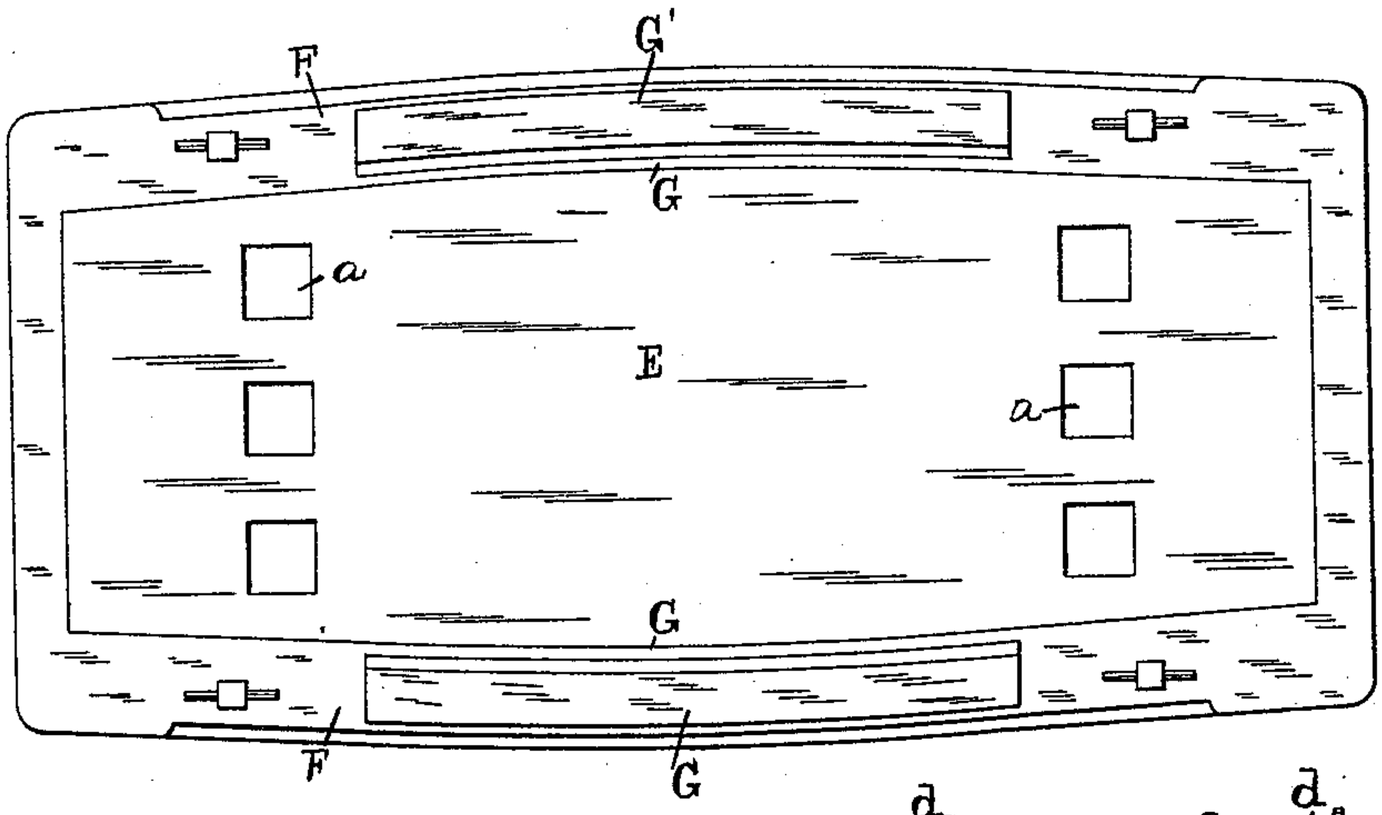

Fig. 2.

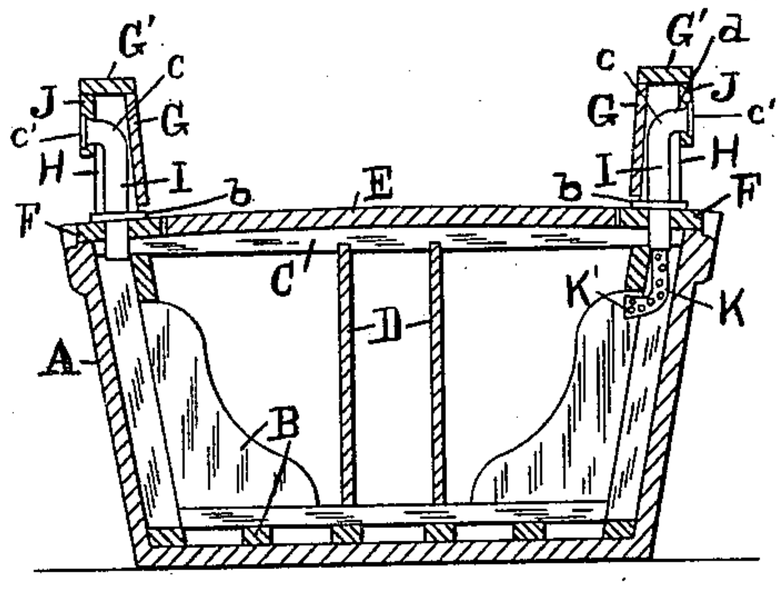

Fig. 3.

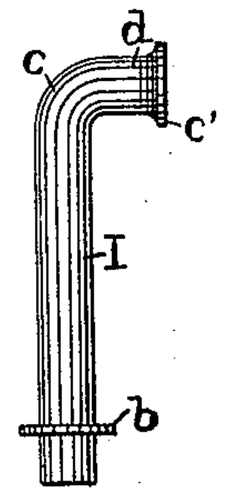

Fig. 4.

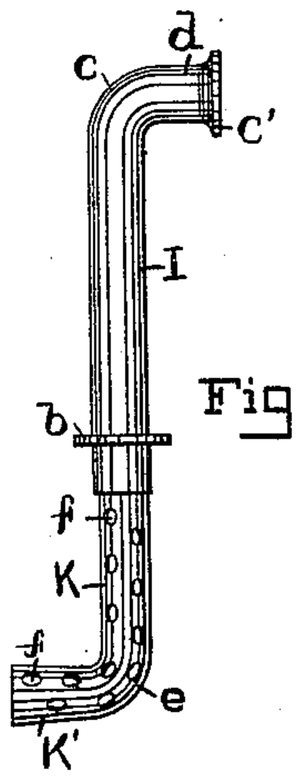

Fig. 5.

WITNESSES:

Otto F. Ehlers.

F. T. Davis.

INVENTOR:

Thomas Price.

BY Chas B. Mann

ATTORNEY.

UNITED STATES PATENT OFFICE.

THOMAS PRICE, OF BALTIMORE, MARYLAND.

VENTILATOR FOR LIGHTERAGE-SCOWS.

SPECIFICATION forming part of Letters Patent No. 463,816, dated November 24, 1891.

Application filed June 26, 1891. Serial No. 397,584. (No model.)

To all whom it may concern:

Be it known that I, THOMAS PRICE, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Ventilators for Lighterage-Scows, of which the following is a specification.

This invention relates to improved means for ventilating lighterage-scows or "lighters," as they are commonly called. These vessels as at present built have not sufficient means of ventilation, and in consequence after a period of use their inside timbers rot out and have to be replaced by new ones. Ordinarily the deck is provided with a number of holes; but when the vessel is loaded these holes are completely covered over and this means of communicating air to the interior is cut off. The dampness which is thus necessarily confined within the vessel is certain to produce disastrous effects on the timbers and eventually rot them out.

The object of my invention is to prevent this rotting of the vessel by providing suitable ventilators which will establish a permanent communication for air to enter the interior of the vessel and will not in any manner be affected by the load on the vessel's deck. These ventilators I arrange so that they will be entirely out of the way and not interfere in any way with the loading of the vessel or reduce its capacity.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a side view of a scow or lighter provided with my improved ventilators. Fig. 2 shows a top or plan view of the same. Fig. 3 shows a central vertical cross-section. Fig. 4 shows a detail view of one form of ventilator, and Fig. 5 shows a similar detail view of another form of ventilator.

The letter A designates the shell of the vessel; B, the ribs of the same; C, the cross-timbers at the upper part; D, the bulk-head partitions supporting said cross-timbers and strengthening the whole structure; E, the deck supported on said cross-timbers; F, the side rails, and G the vertical walls or "waists" rising from said side rails at the middle of the vessel. These walls or waists are secured to uprights or posts H, and top rails or strips G′ are secured across on the tops of said posts. The load of the vessel is to be placed on the deck E between the waists G.

The letter *a* designates the holes that are commonly provided in the deck. It will be apparent that when a load is on these holes are all closed over.

I provide a number of ventilating-pipes I, one being located between each two of the posts H, to which the waists G are secured. Each of these pipes comprises a vertical portion, which extends down through the side rail F into the interior of the vessel and has a shoulder or flange *b* resting on the top of said side rail and fastened down to the same. At its upper end the pipe has an elbow *c* and a short lateral mouth *d* extending outward from said elbow and flared at the end. This mouth *d* fits through a strip J, secured to the outside of the posts H, and has a shoulder or flange *c′* taking over the said strip. The pipes are open at both ends to conduct air down into the interior of the vessel, where it distributes itself through the timbers and keeps the vessel well ventilated, preventing rot and decay. To further the distribution of the air, I may fit a perforated pipe K into the lower end of each pipe I, as shown in Fig. 5. This perforated pipe will have an inward-extending elbow *e* and a flared lower end K′. Air conducted by the pipe I down into the vessel will be distributed through the perforations *f* in the pipe K, and will also pass out of the flared end K′ of the same toward the center of the boat. The ventilating-pipes being arranged alongside the deck, with their upper ends on the outside of the vertical side wall or waists G, will not interfere in any way with the loading of the lighter and will not be affected by the load. It will be observed that the pipes are well protected, as they are inclosed between the waists G, the posts H, and the strips G′ and J.

It is evident that the construction here shown may be varied, and therefore I do not confine myself to the same, but consider that I am entitled to all such changes as come within the spirit and scope of the invention.

Having thus described my invention, what I

claim as new, and desire to secure by Letters Patent, is—

In a lighterage-scow, the combination of the side rails F, the vertical walls or waists along each side of the deck and secured to uprights or posts rising from said side rails, rails or strips secured across the tops of said posts, ventilating-pipes on the outside of the vertical walls or waists and between the uprights or posts to which the latter are secured, said pipes having outward-extending upper ends or mouths covered by the top rails on the posts, and strips secured to the outer sides of the said posts and through which the said mouths of the ventilating-pipes extend, in the manner described.

In testimony whereof I affix my signature in the presence of two witnesses.

his
THOMAS × PRICE.
mark

Witnesses:
R. J. ASHCROFT,
F. P. DAVIS.