V. E. Campbell.

Fire Extinguisher.

No. 86,360. Patented Feb. 2, 1869.

Fig: 1.

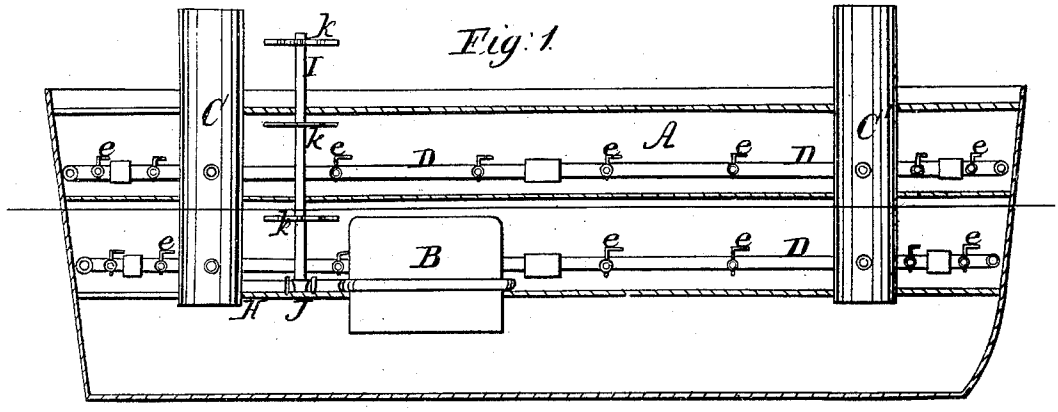
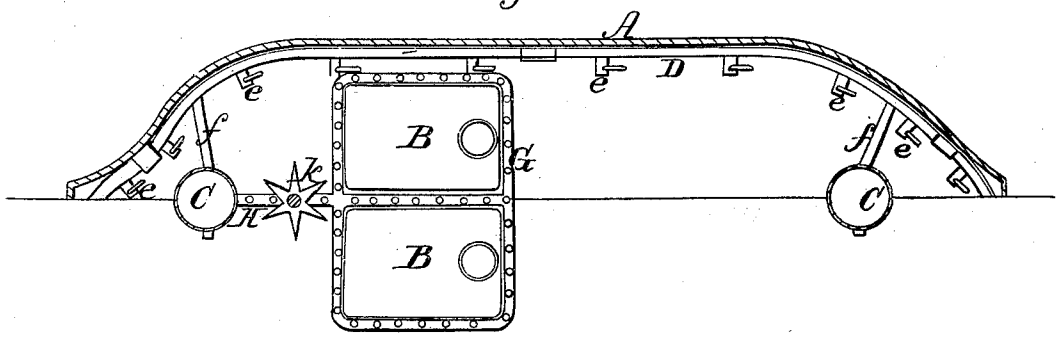


Fig: 2.



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UNITED STATES PATENT OFFICE.

V. E. CAMPBELL, OF STERLING CENTRE, NEW YORK.

IMPROVED FIRE-EXTINGUISHING APPARATUS FOR VESSELS.

Specification forming part of Letters Patent No. **86,360**, dated February 2, 1869.

To all whom it may concern:

Be it known that I, V. E. CAMPBELL, of Sterling Centre, in the county of Cayuga and State of New York, have invented a new and Improved Mode of Extinguishing Fires in Vessels; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The invention consists in attaching to the sides of a steamboat or sailing-vessel, (between the decks,) water tubes or pipes, which are connected with reservoirs or tanks and supplied with water from such reservoirs or tanks of water, and in providing each compartment or room in such vessel or steamboat with a water-cock and hose-connection with such water-pipe; and also in surrounding the boilers of a steamboat with a water-pipe, which is supplied with water from a reservoir; and in an arrangement whereby the water may be discharged around the outside of the boiler from either deck, as will be hereinafter more fully described.

Figure 1 represents a vertical longitudinal section of a steamboat provided with the water pipes and reservoirs. Fig. 2 is a horizontal section of Fig. 1 through the line *x x*.

Similar letters of reference indicate corresponding parts.

A represents the side or hull of the vessel. B represents the boilers. C C′ represent the water-reservoirs. D represents the water tubes or pipes, which are attached to the sides or hull of the vessel, and which extend all around the vessel on the inside, between the decks, as seen in the drawing.

The reservoirs are placed in any convenient part of the vessel, and are sufficiently elevated to give a suitable head or pressure of water in the pipes.

The pipes D are provided with water-cock and convenience for attaching a hose in each of the compartments of the vessel, as seen at *e*.

f represents the supply-pipes from the reservoir.

The boilers are surrounded by a perforated pipe, G, as seen in the drawing. This pipe is supplied from the reservoir C by the pipe marked H, in which there is a valve or cock at J. This cock is operated by the vertical rod I, which has arms *k* attached to it, so that the cock can be turned from each deck and the boiler and its surroundings be flooded with water at a moment's warning in case of fire near or originating from the boilers.

It will thus be seen that ample provision is made for flooding any portion of the vessel and extinguishing a fire in any part at the shortest notice.

The advantages of this arrangement will be apparent to all. The means of extinguishing a fire are ever at hand, and may be applied at once by passengers or men without pumping or the tardy use of buckets. The reservoirs are kept full by a pump driven by the engine or by hand, as the case may be. When once full and the water properly applied a small quantity will always be found sufficient.

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

The arrangement, in the vessel, of the pipes D, provided with separate hose for each compartment of the vessel, in combination with the pipes G surrounding the boilers, the reservoirs C C′, and the valve-rod J, provided with arms *k* at each deck, as herein described, for the purpose specified.

The above specification of my invention signed by me this 4th day of February, 1868.

V. E. CAMPBELL.

Witnesses:

WM. F. MCNAMARA,

ALEX. F. ROBERTS.