

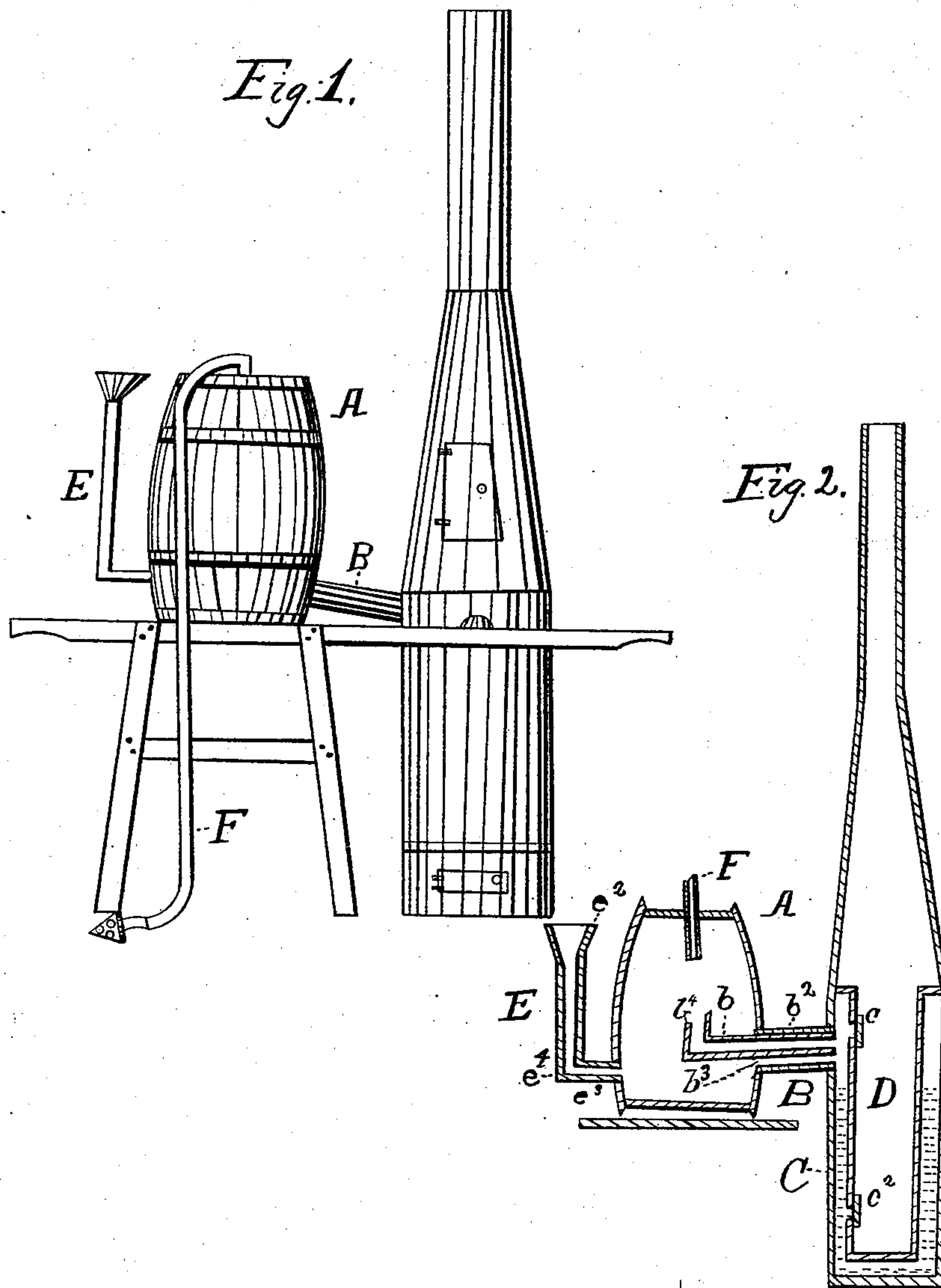
(Model.)

E. HOOVER & J. F. WINANS.

FEED STEAMER.

No. 370,787.

Patented Oct. 4, 1887.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELEAZER HOOVER AND JOHN F. WINANS, OF SPRINGFIELD, MISSOURI.

FEED-STEAMER.

SPECIFICATION forming part of Letters Patent No. 370,787, dated October 4, 1887.

Application filed June 24, 1886. Serial No. 206,162. (Model.)

To all whom it may concern:

Be it known that we, ELEAZER HOOVER and JOHN F. WINANS, citizens of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Feed-Steamers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention is an improvement in feed-steamer, the object of which is to provide a cheap, simple, durable, and convenient device for steaming grain or any desired substance. These objects we attain by means of the device illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front elevation of the device; Fig. 2, a longitudinal vertical sectional view.

The same letters of reference indicate the same or corresponding parts in both figures.

A is an ordinary vessel of any desired size and shape, preferably a keg placed upon a frame and resting upon one end.

E is a tube, one end, e^3 , of which enters the keg or vessel near its bottom. Said tube has an elbow or is bent at e^4 , and the upper end is provided with a funnel-shaped top, e^2 , which is placed near the top of the vessel for pouring in water when necessary. Keg A is also provided with a suitable hose, F, which enters the top of the keg, and is to discharge the steam or carry it to any desired place where it may be wanted for heating. Said hose F is provided with a suitable nozzle.

Keg A is connected near its bottom with a receiving and discharging tube, B, consisting of a large tube, b^2 . Tube b extends farther into keg A than tube b^2 , and is bent or turned up at its inner end, b^4 , so as not to interfere with the cold-water passage b^3 , and is for the purpose of conveying the steam from heating-boiler C to keg A. Tube b^2 is for the purpose of conveying the cold water from keg A into the heating-boiler C. Boiler C is made double, forming a water-jacket surrounding the fire-chamber. Boiler C is also provided with small

holes c c^2 , opening from the boiler into the furnace D. One hole is placed near the top of the boiler and the other near the bottom of it. These holes are covered with a plate secured with easily-fused solder, so that if the water should get low the solder, after the water got below the holes, would melt, and the water and steam would then flow into the furnace and extinguish the fire.

Thus we have a device the keg or vessel A of which has but one hole for the receiving and discharging tubes, and one which is provided with a supply-tube, E, so that water may be put in at any time without permitting the steam to escape, and also a device from which the hot water may be drawn off by tipping the tube E to one side. Said tube also serves as a safety-vent to prevent too great an amount of pressure by the steam in the keg.

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

1. The combination, with a furnace, D, and boiler C, of a vessel, A, connected with said boiler by a double receiving and discharging tube, B, a funnel and elbow shaped supply-tube, E, and steam-hose F, substantially as and for the purpose set forth.

2. The combination of a water-receptacle, A, provided with a water supply and discharge tube, E, with a receiving and discharging tube, B, composed of a cold-water-supply tube, b^2 , containing a bent longer and small steam-tube, b , a boiler, C, and furnace D, substantially as and for the purpose set forth.

3. The combination, with the furnace D, of a boiler, C, having holes c c^2 , covered with plates soldered thereon, a double receiving and discharging tube, B, vessel A, with steam-hose F, and water-supply tube E, all substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ELEAZER HOOVER.
JOHN F. WINANS.

Witnesses:

S. A. HASELTINE,
S. C. HASELTINE.