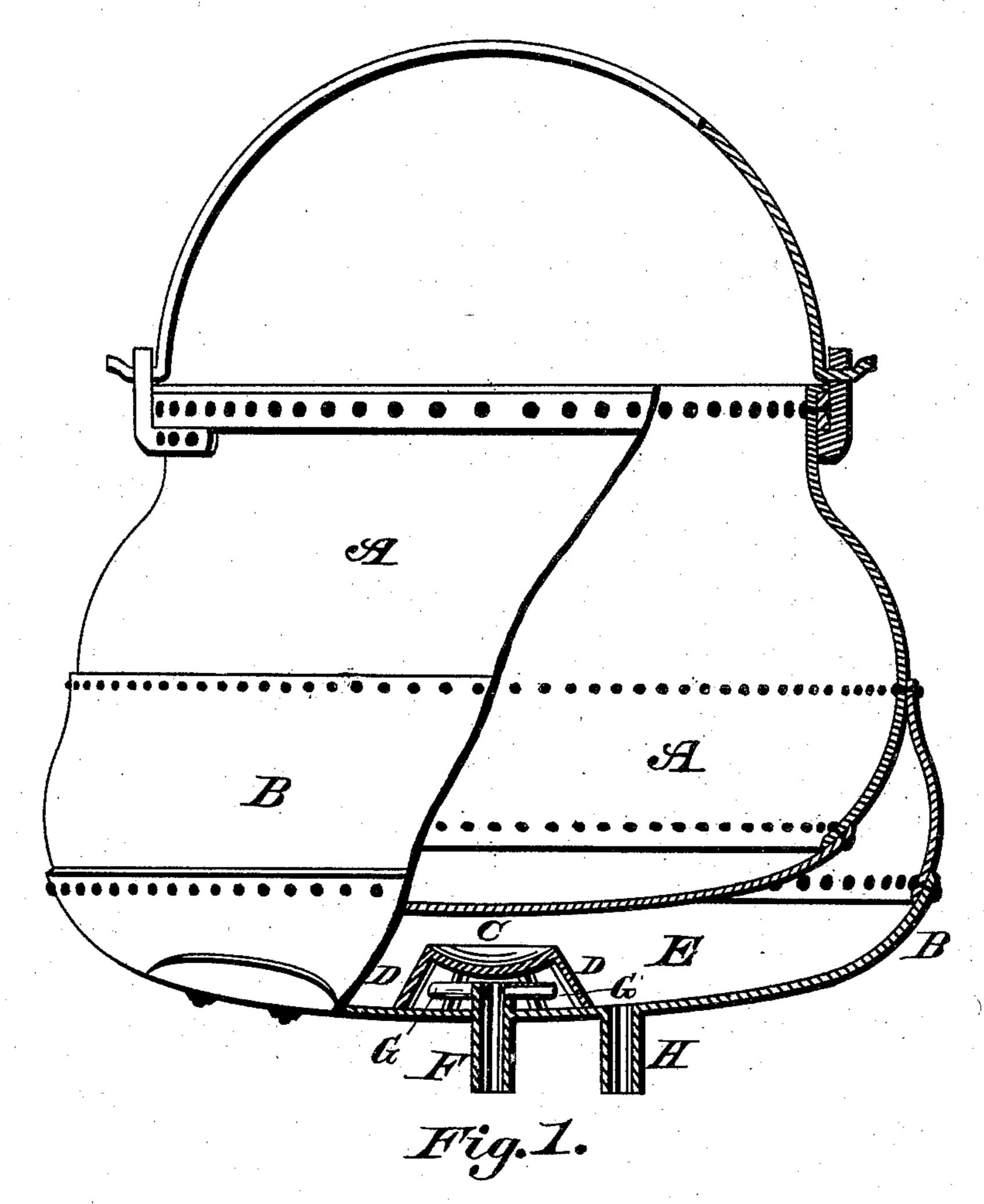
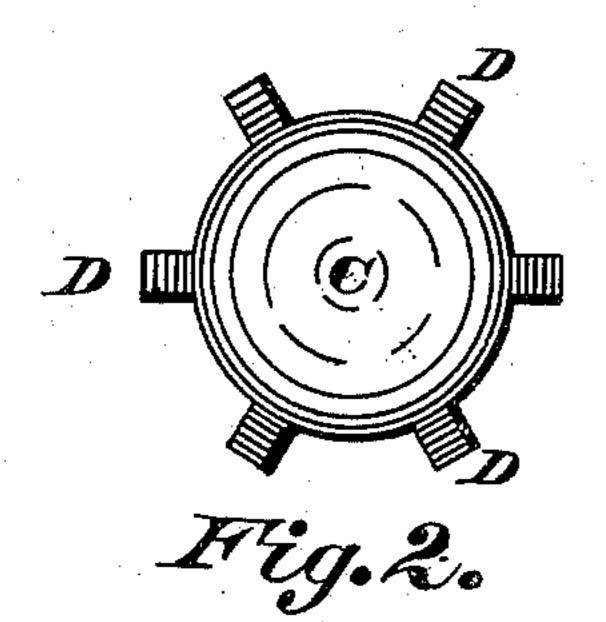
(No Model.)

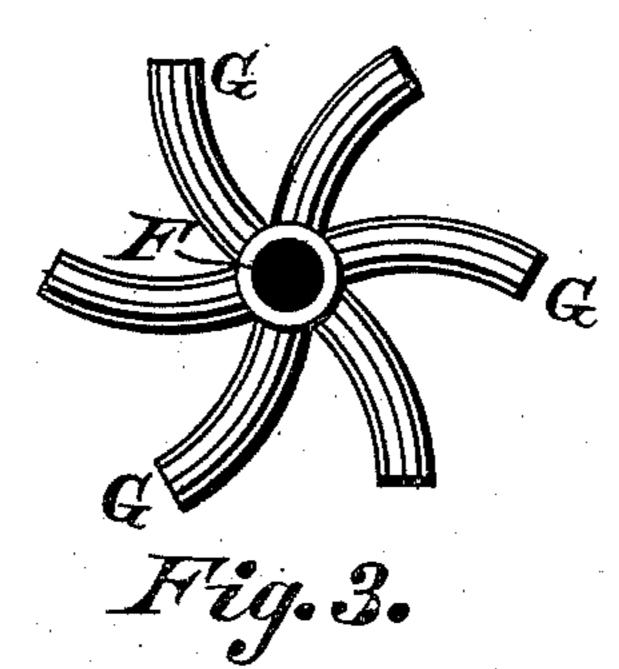
H. WERNET.
STEAM KETTLE.

No. 335,663.

Patented Feb. 9, 1886.







WITNESSES:

Starry Frease.

3. Cenz Wernet, INVENTOR

Find W. Bond

ATTORNEY

## United States Patent Office.

## HENRY WERNET, OF CANTON, OHIO.

## STEAM-KETTLE.

SPECIFICATION forming part of Letters Patent No. 335,663, dated February 9, 1886.

Application filed March 9, 1885. Serial No. 158,134. (No model.)

To all whom it may concern:

Be it known that I, Henry Werner, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Steam-Kettles, of which the following is a specification.

In the accompanying drawings, Figure 1 is a side view showing a portion of the kettle broken away and showing the internal construction. Fig. 2 is a detached view of the diaphragm. Fig. 3 is a detached view of the inlet-pipe with the branches.

The present invention relates to that class of steam-kettles in which a steam-jacket is provided; and it consists in the construction and combination of parts hereinafter described and claimed.

In the said drawings, A represents the ket-20 tle proper, to which is attached the steamjacket B, both of which may be of the form and construction shown.

Within the jacket B is located the diaphragm C, it being supported and held in po-25 sition about half way between the jacket B and bottom of kettle A by means of the supports D. These supports are attached at their upper ends to the periphery of the diaphragm, and extend down and are pivoted or bolted to 30 the bottom of the steam-jacket B. The bottom or under side of the diaphragm C, which is located centrally above the steam-inlet, is convexed, so as to more effectually spread the steam as it enters the steam chamber E, its 35 object being to prevent the live steam from striking directly against the bottom of the kettle proper, and thereby preventing the scorching of the contents of the kettle.

F is the steam-inlet pipe, open at its upper 40 end, and should be provided with an ordinary stop-cock, so as to properly regulate the quantity of steam in the chamber. It is provided at its upper end, just beneath the diaphragm

C, with a number of branches, G, which may be tapped in or otherwise made to communi- 45 cate with the inlet-pipe. They extend radially from the inlet-pipe and may be of any length and number desired. These branches serve to spread or diffuse the steam in addition to the diaphragm, and also serve to regulate the 50 heat with reference to the contents in the kettle, the steam being partially cooled off by passing through said arms or branches.

H is an outlet-pipe, by which the condensed steam may be drawn off. The jacket Bshould 55 also be provided with a man-hole and cover, so that access may be had thereto when desired.

The operation is as follows: Steam from an ordinary boiler or other source is admitted to 60 the inlet-pipe F, and is discharged at its upper end against the diaphragm C, which will spread or diffuse it throughout the chamber E, and prevent its striking directly against the bottom of the kettle. The steam also enters the chamber E through the branch pipes G, whereby it is more thoroughly diffused than if it entered through the upper open end of the inlet-pipe F only.

What I claim is—
The combination, with the kettle A and steam jacket B, of the diaphragm C, located in the chamber E, the supports D, attached to the bottom of the jacket B and the diaphragm C and supporting said diaphragm 75 centrally over the steam-inlet, the inlet-pipe F, having the branches or arms G, connected to and communicating therewith, and the outlet-pipe H, substantially as described.

In testimony that I claim the above I have 80 hereunto subscribed my name in the presence of two witnesses.

HENRY WERNET.

Witnesses:

FRED. W. BOND, HARRY FREASE.