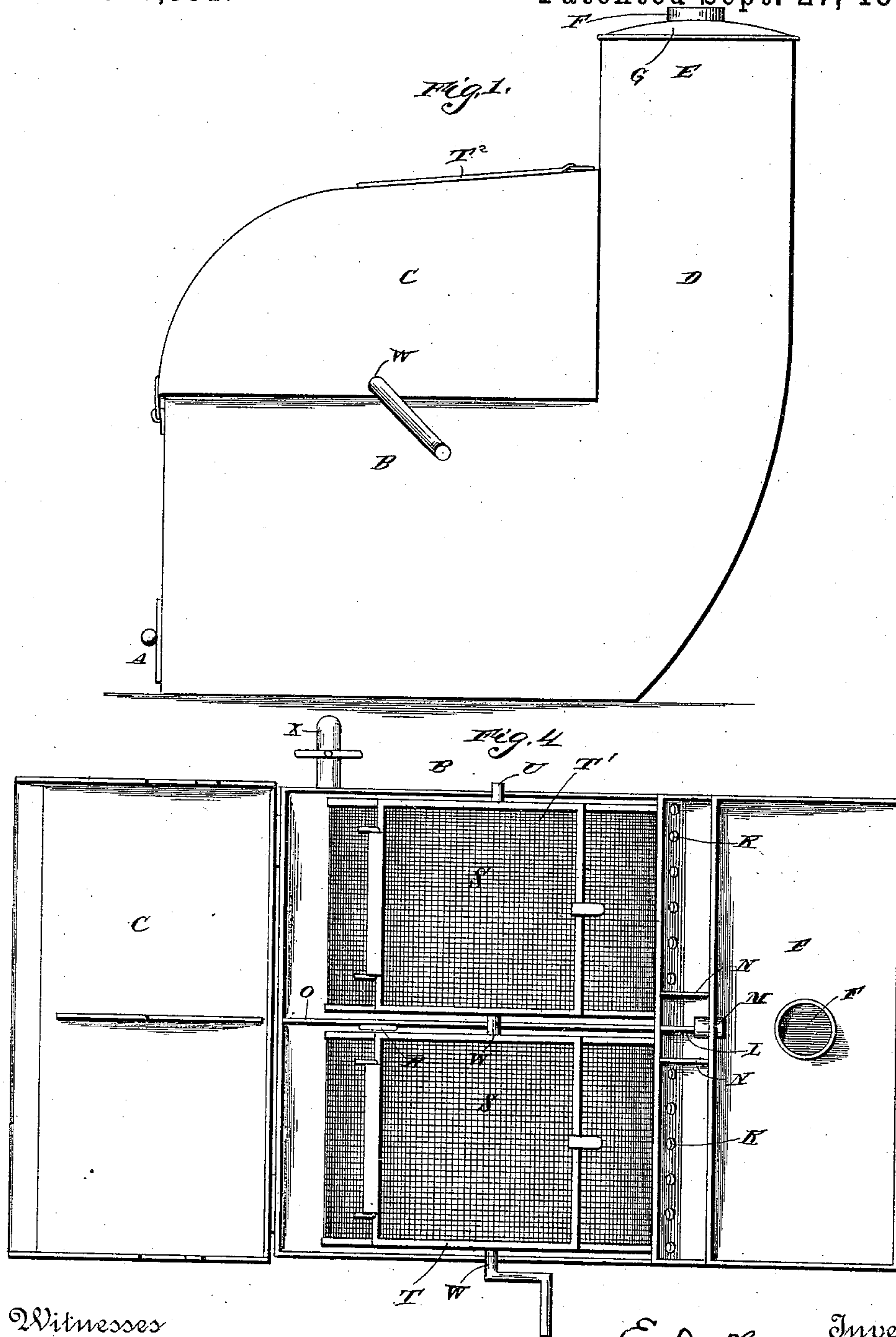


2 Sheets—Sheet 1.

No. 370,391.

Patented Sept. 27, 1887.



Witnesses

T. B. Taylor

J. W. Garner

E. D. Hastings Inventor

By his Attorneys,

C. A. Howells

(No Model.)

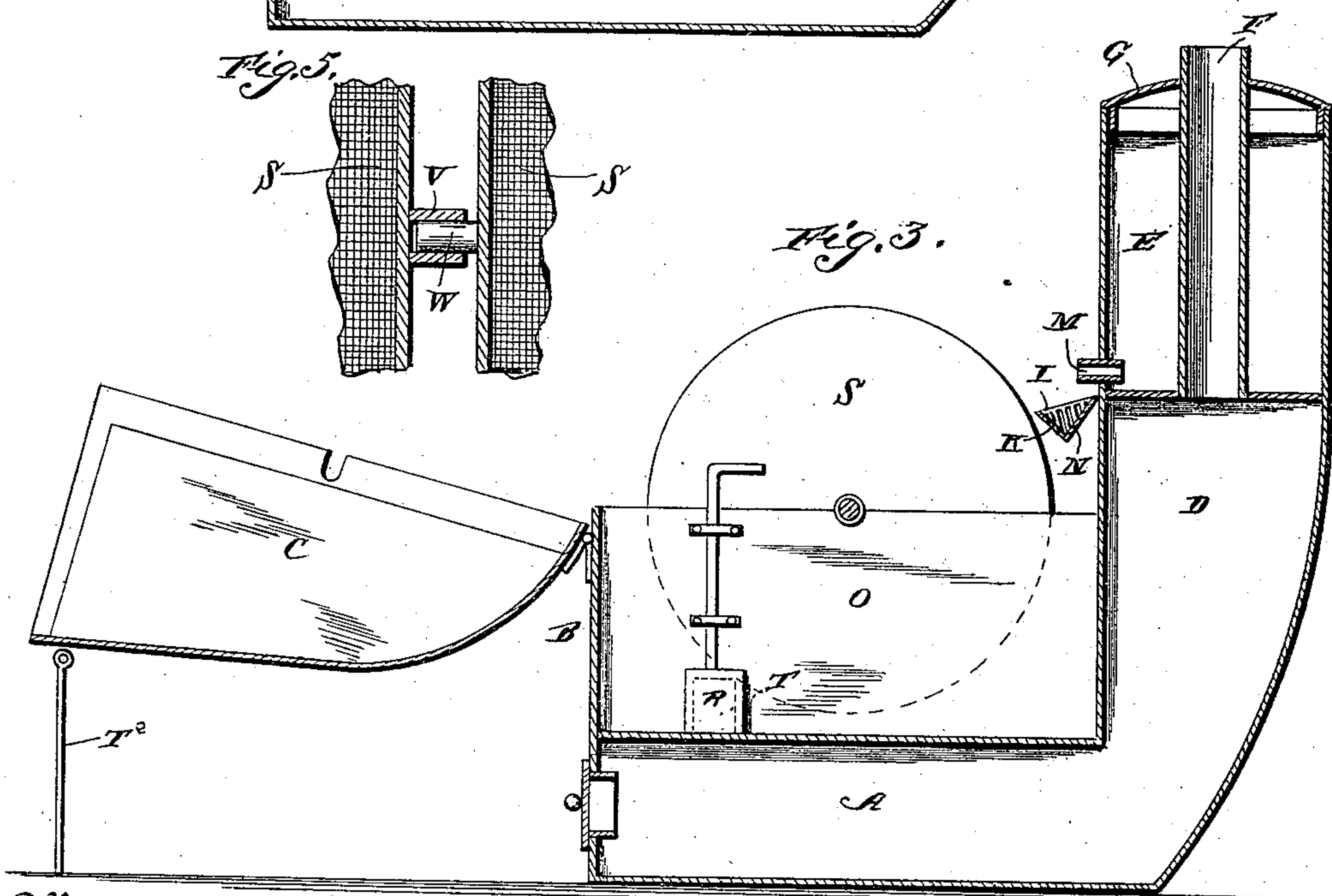
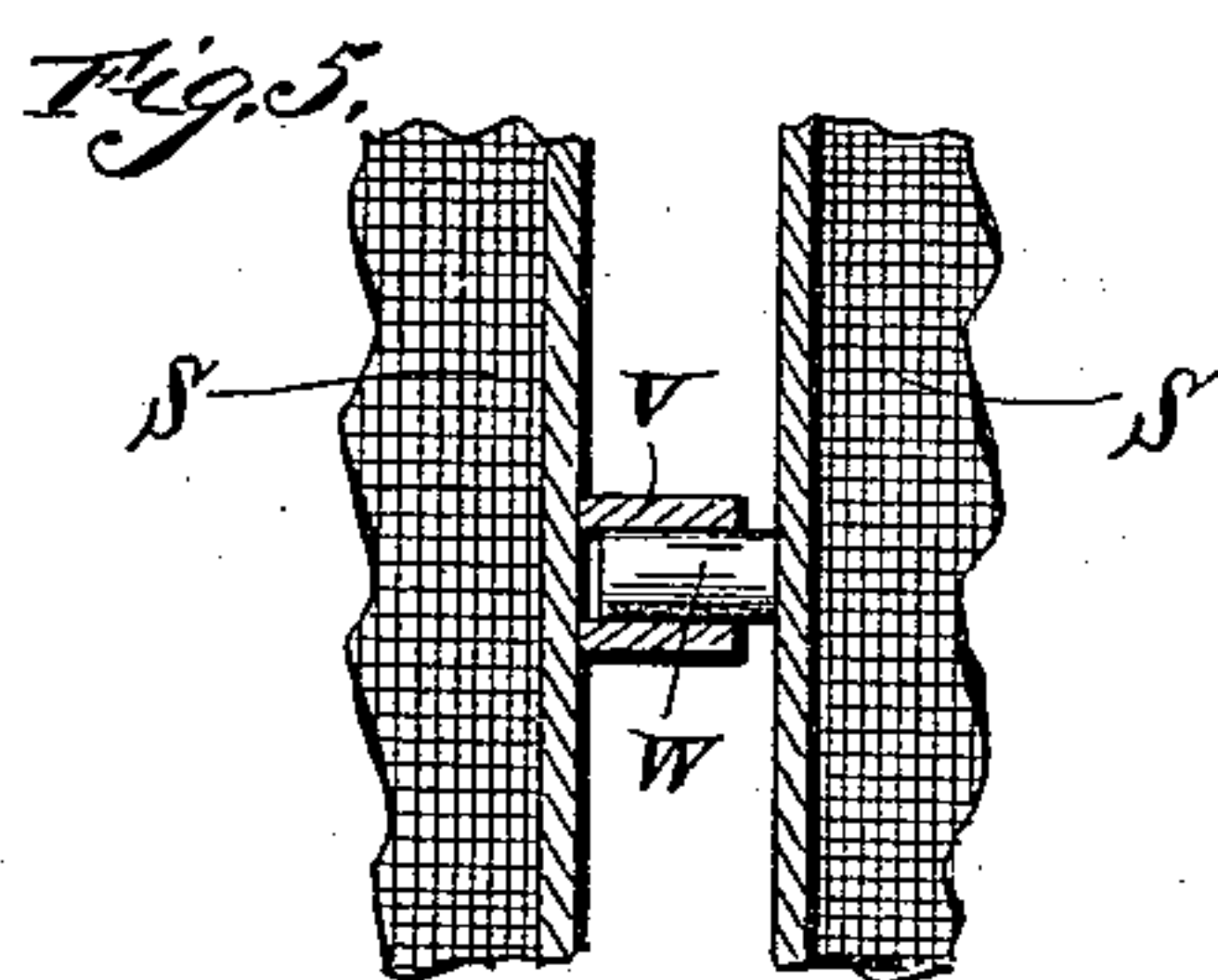
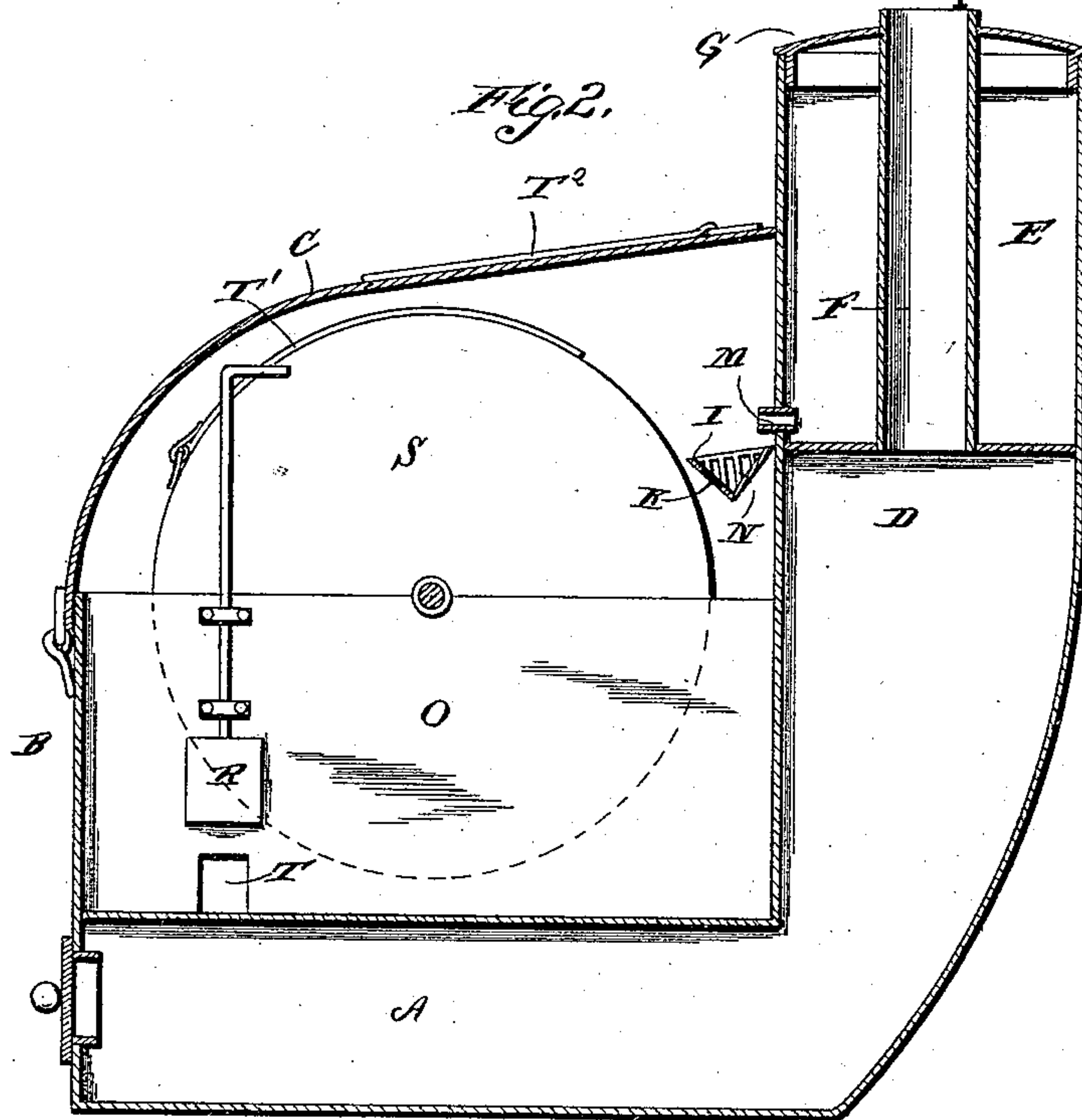
2 Sheets—Sheet 2.

E. D. HASTINGS.

WASHING MACHINE.

No. 370,391.

Patented Sept. 27, 1887.



Witnesses

E. D. Taylor

J. W. Garner

Inventor
E. D. Hastings

By his Attorneys,

C. A. Howells

UNITED STATES PATENT OFFICE.

EPHRIAM D. HASTINGS, OF PATAHA CITY, WASHINGTON TERRITORY.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 370,391, dated September 27, 1887.

Application filed March 24, 1887. Serial No. 232,306. (No model.)

To all whom it may concern:

Be it known that I, EPHRIAM D. HASTINGS, a citizen of the United States, residing at Pataha City, in the county of Garfield and Territory of Washington, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

My invention relates to an improvement in washing-machines; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of a washing-machine embodying my improvements. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a similar view showing the cover of the washing-machine flung open. Fig. 4 is a top plan view in the same position. Fig. 5 is a detail view.

A represents a fire-box or combustion-chamber, over which is arranged a boiler, B, which is provided with a hinged cover, C. From the rear end of the fire-box extends a vertical flue, D, in the upper part of which is formed a supplemental boiler, E. A vertical pipe, F, projects upward from the bottom of the boiler and passes through the same, and the upper portion of the said pipe passes through an opening which is made in the removable cover G, with which the boiler E is provided.

On the front side of the boiler E, at the bottom thereof, is a trough, I, the outer side of which is provided with a series of openings, K. The said trough is divided at its center by a transverse partition, L, and, arranged directly over the said partition, is a discharge-faucet, M, with which the boiler is provided. On each side of the partition L and at a suitable distance therefrom is a perforated partition, N. The spaces between the central partition and the perforated partitions N serve as receptacles for cakes of soap.

The boiler B is divided longitudinally into two compartments of equal dimensions by a vertical partition-plate, O. This plate is provided with an opening, T, to establish communication between the two compartments, and a vertical slide-valve, R, which is adapted to close the said opening, and thereby cut off communication between the compartments.

S represents a pair of cylindrical drums,

which are made of wire-gauze or other suitable perforated material, and are each provided with a hinged door, T', whereby access may be obtained to the interior of the drums. One of the drums is provided on its outer side, at the center, with a trunnion or stud, U, adapted to bear in a recess in the upper edge of one side of the boiler B, and from the opposite side of the said drum projects a hollow sleeve or trunnion, V, which bears in a recess in the upper edge of the partition-plate O. The other drum is provided at its center with projecting trunnions W, one of which is adapted to enter the hollow trunnion or sleeve V, and the other is adapted to bear in a recess in the upper end of the opposite side of the boiler B, and is provided with a crank-handle, whereby the drums may be rotated. Near the lower side of the boiler B is a faucet, X, by means of which the contents of the boiler may be drawn off.

The cover C is hinged to the outer end of the boiler B at the upper side thereof, and the said cover is curved, and thereby adapted to fit over the drums S when the cover is closed. The inner end of the cover, when it is closed, bears against the front side of the boiler B and covers the trough.

The operation of my invention is as follows: The clothes to be washed are placed in the drums S, and the latter are mounted in the boiler B, as shown and hereinbefore described. A suitable quantity of water is placed in the boiler B, and the boiler E is also provided with a suitable quantity of water, and steam is raised in the said boilers by building a fire in the combustion-chamber. The cover C is closed over the drums, and the articles therein become thoroughly saturated with the steam from the boiler B, thereby loosening the dirt. After thus subjecting the articles to the action of steam for a suitable length of time, the drums are rotated in the water in the boiler B, thereby effectually washing the clothes. In order to rinse the same, the water is drawn out from the boiler B and the faucet M is opened, thereby causing the clear water from the boiler E to flow into the trough and escape from the latter through the openings K onto the perforated peripheries of the drums, and the latter being rotated, it will be readily seen that all the articles therein will be subjected to the

cleansing action of the pure water. If cakes
of soap are placed in the trough between the
partition L and the perforated partitions N,
suds will be supplied from the boiler E to the
5 boiler B, as will be readily understood, and
by omitting the soap and adding a suitable
quantity of bluing to the water in the boiler
E the clothes may be blued.

By dividing the boiler B into two compart-
10 ments and providing the two rotating drums
it will be readily understood that the articles
in one of the said drums may be washed while
the articles in the other drum are being rinsed,
and this also admits of separating white arti-
15 cles of clothing from colored ones while being
washed.

The free end of the hinged cover is provided
with a pivoted supporting-foot, T², by means
of which the free end of the cover is supported
20 above the ground or floor when the cover is
swung outward in the position indicated in
Fig. 3.

Having thus described my invention, I
claim—

1. The combination of the fire-box A, the 25
boiler B, arranged over the same, the vertical
flue D at the rear end of the fire-box, and hav-
ing the supplemental boiler E at its upper
side, provided with discharge-openings, and
the trough I on the side of the supplemental 30
boiler, and the perforated drums journaled in
the sides of the boiler B and arranged below the
trough, substantially as described.

2. In a washing-machine, the combination
of the boiler B, the rotating drums therein, the 35
boiler E, arranged above the boiler B and hav-
ing the discharge-trough I, the latter being
provided with receptacles, for the purposes set
forth, substantially as described.

In testimony that I claim the foregoing as 40
my own I have hereto affixed my signature in
presence of two witnesses.

EPHRIAM ^{his} × D. HASTINGS.
mark.

Witnesses:

J. H. WAU,
ISAAC OLIVER.