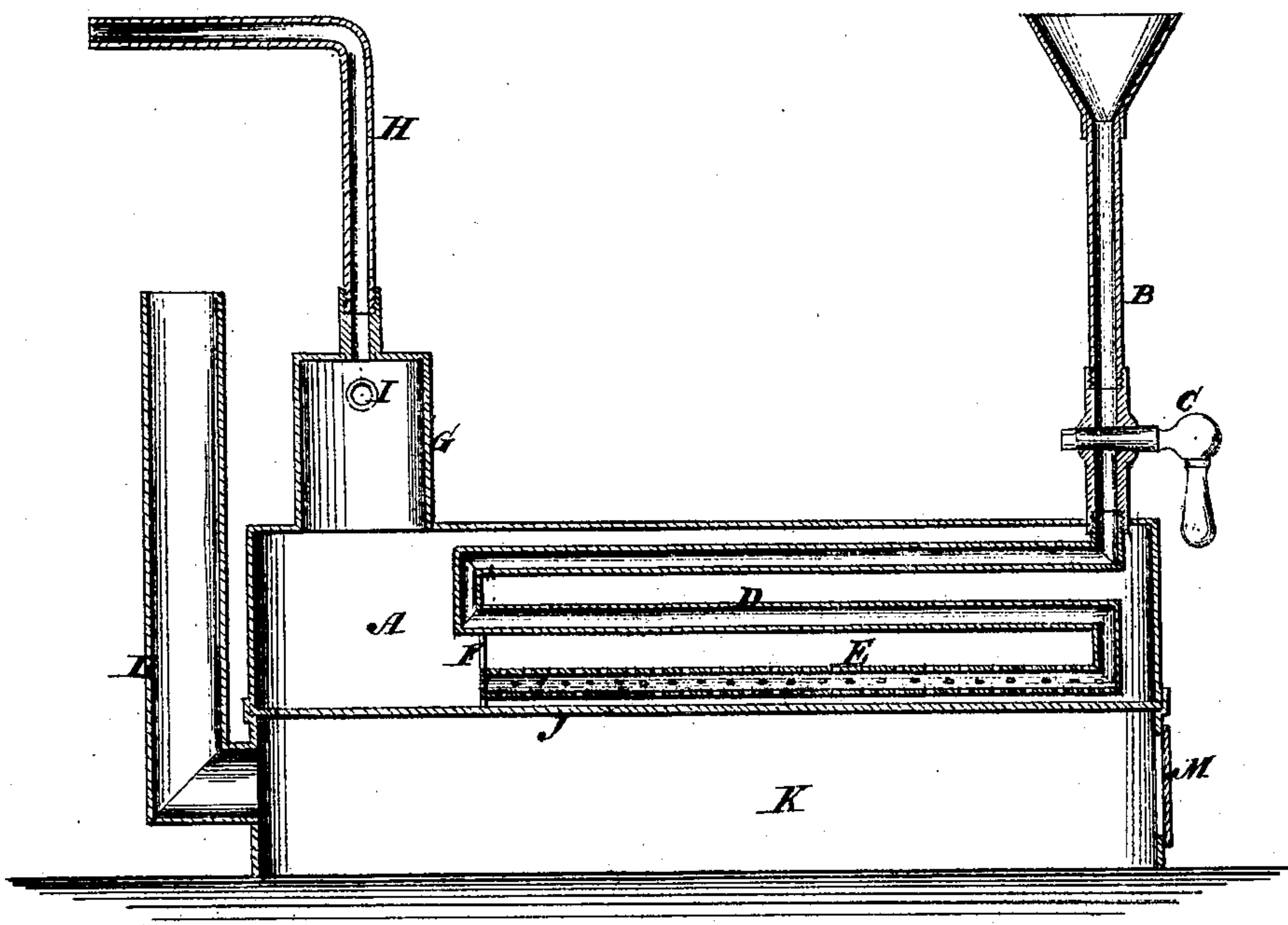


Patented Dec. 20. 1870.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MORRIS WOOD, OF CHILLICOTHE, ILLINOIS.

IMPROVEMENT IN STEAM-GENERATING APPARATUS.

Specification forming part of Letters Patent No. 110,321, dated December 20, 1870.

To all whom it may concern:

Be it known that I, MORRIS WOOD, of Chillicothe, in the county of Peoria and State of Illinois, have invented a new and useful Improvement in Steam-Generating and Distilling Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in an apparatus for generating steam for cooking food or other purposes when steam at low pressure only is required, and also for distilling purposes; and consists in the combination and arrangement of tubes or pipes in a water-chamber over a furnace or fire-box, and operating as hereinafter described.

The accompanying drawing represents a vertical longitudinal section of the steamer placed over a furnace.

Similar letters of reference indicate corresponding parts.

A is the boiler, with flat top and bottom, and made broad and shallow, as represented in the drawing. B is the pipe through which the water or liquid is introduced. C is a stop-cock therein. The pipe B discharges the water into the horizontal pipe D, which extends back near the rear end of the boiler, and then returns to or near the front, and then, dropping down near the bottom of the boiler, it again

turns back. This latter section E is perforated with holes, through which the water is distributed to the fire-surface. F is a brace or stay for supporting the pipe D. The perforated portion may be supported by blocks resting on the bottom of the boiler. G is a steam-drum on top of the boiler, from which steam is taken for use either through the pipe H or from the tube I. J is the bottom of the boiler. K is the furnace, extending entirely beneath the boiler, thus making the entire bottom heating or fire surface. L is the flue through which the smoke is discharged. M is the door through which the fuel is introduced.

For distilling purposes, or for generating steam for cooking and many other purposes where but a low pressure is required, this arrangement will be found to combine many advantages over ordinary steam-generators.

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

A shallow boiler, A, whose whole bottom J is over the fire, combined, as described, with a coil, D, having a perforated supply-pipe, E, parallel with and very near to the said bottom J, for the purpose of generating steam at a low pressure for cooking, distilling, or other purposes.

MORRIS WOOD.

Witnesses:

A. M. GIBBONS,
WM. B. RAMSAY.