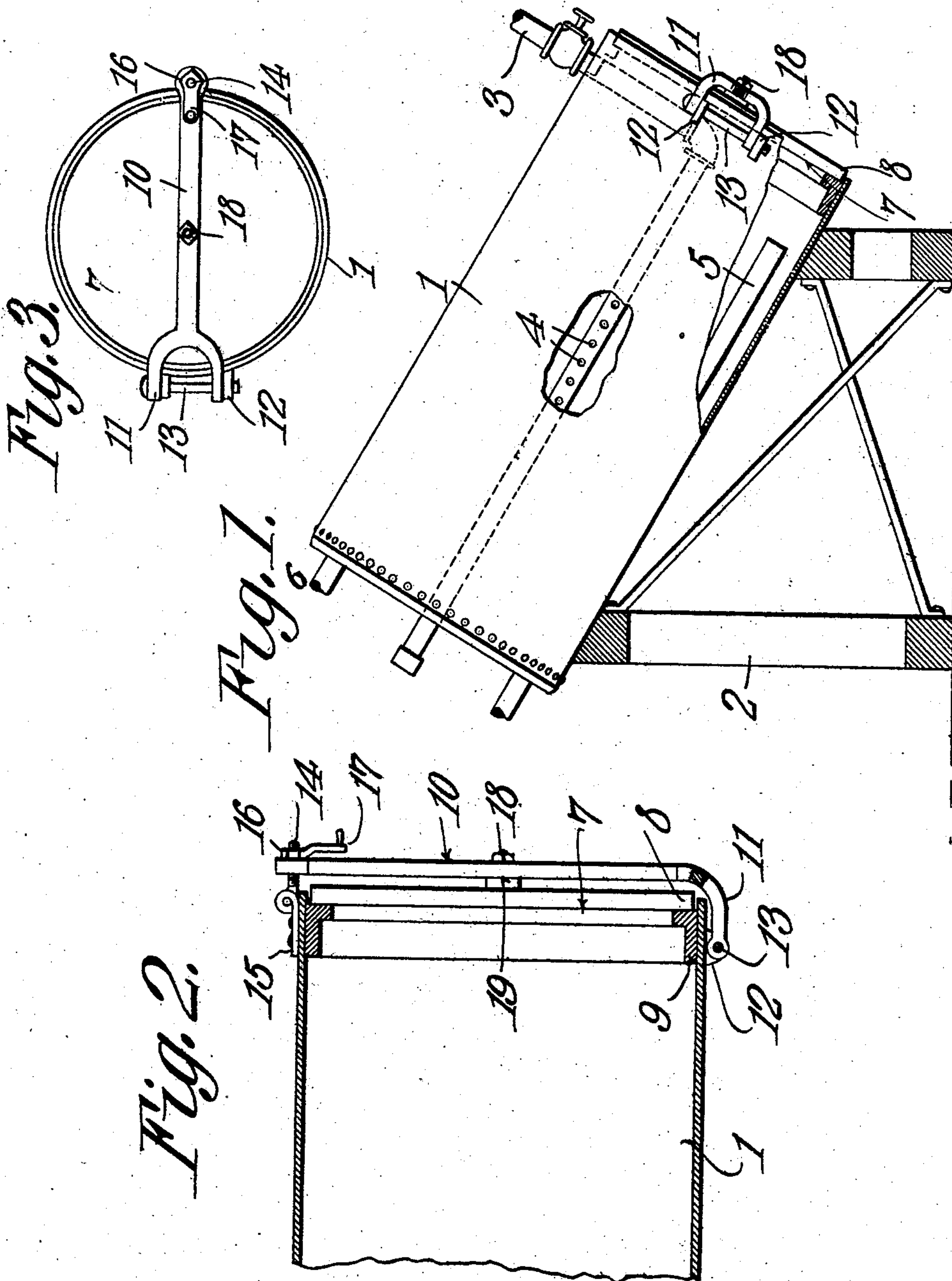


No. 850,133.

PATENTED APR. 16, 1907.

M. J. CAMPBELL.
CLOSURE FOR RETORTS.
APPLICATION FILED AUG. 3, 1905.



Malcolm J. Campbell,
INVENTOR.

WITNESSES:
E. J. Stewart
Hubert D. Lewson

By *Chas. Snow & Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

MALCOLM J. CAMPBELL, OF SUMRALL, MISSISSIPPI.

CLOSURE FOR RETORTS.

No. 850,133.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed August 3, 1905. Serial No. 272,573.

To all whom it may concern:

Be it known that I, MALCOLM J. CAMPBELL, a citizen of the United States, residing at Sumrall, in the county of Lamar and State of Mississippi, have invented new and useful Closures for Retorts, of which the following is a specification.

This invention relates to turpentine-retorts, and more particularly to closures therefor.

The object of the invention is to provide a simple and thoroughly efficient form of closure which is effective in sealing the retort and by means of which discharging of the contents of the retort may be readily and rapidly effected.

With the above and other objects in view the invention consists of certain novel features of construction and combinations of parts which will be hereinafter more fully described, and pointed out in the claim.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a side elevation of a portion of a retort embodying improvements constituting the present invention. Fig. 2 is an enlarged section there-through, and Fig. 3 is an end elevation.

Referring to the figures by characters of reference, 1 is a retort constructed, preferably, of heavy boiler-iron and supported in an inclined position upon a base 2, which may be of the usual or any preferred construction. A steam-pipe 3 extends into the retort and has a portion which extends longitudinally of said retort and provided with apertures 4, from which the steam is adapted to escape. A blow-off pipe 5 also extends from the retort and a vapor-outlet pipe 6 will also be suitably disposed upon the retort. The parts set forth in the foregoing description do not embody any features of the present invention, but merely illustrate one form of retort with which the invention may be used.

The lower end of the retort 1 is closed by a discharging-door 7, which is provided with a peripheral flange 8, adapted to engage an annulus 9, secured to the interior of the retort adjacent its lower end in order to form a steam-tight juncture, this being effected by means of a locking-bar 10, one end of which carries a yoke 11, pivotally combined with ears 12, extending from one side of the re-

tort by a bolt 13. The other end of the bar 10 is bifurcated to receive a bolt 14, which is hinged to a plate 15, bolted or otherwise secured to the shell 1, said bolt having combined with it a nut 16, carrying a crank 17, by which it can be turned. The bar is connected with the central portion of the door 7 by a bolt 18, which serves to secure in position a spacing-block 19, which operates as a fulcrum against which the bar will bear and will cause the door to tightly impinge against the annulus when the crank-nut 16 is seated.

In using a retort having these improvements the door 7 is sealed or secured in position and the wood to be distilled is placed within the retort and the distilling operation carried out in any well-known manner. When the operation has been carried as far as desired, the locking-bar 10 is released and thrown to one side, carrying with it the door 7, whereupon the contents of the retort will, by reason of the incline of the retort, be discharged to the ground.

The preferred form of the invention has been set forth in the foregoing description; but I do not limit myself hereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of the claim.

Having thus described the invention, what is claimed is—

The combination with a retort; of an annulus secured on the interior of one end thereof, a door of substantially the same diameter as the internal diameter of the retort, ears upon the retort, a locking-bar having a curved forked end overlapping the end of the retort and pivoted to the ears, a spacing-block upon the center of the door and immovably connecting the door and bar, a bolt pivoted to the retort and detachably seated in one end of the bar, and means upon the bolt for drawing the bar toward the retort to clamp the door evenly upon the annulus to seal the retort.

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

MALCOLM J. CAMPBELL.

Witnesses:

J. A. MCGILL,
J. W. SHANKS.