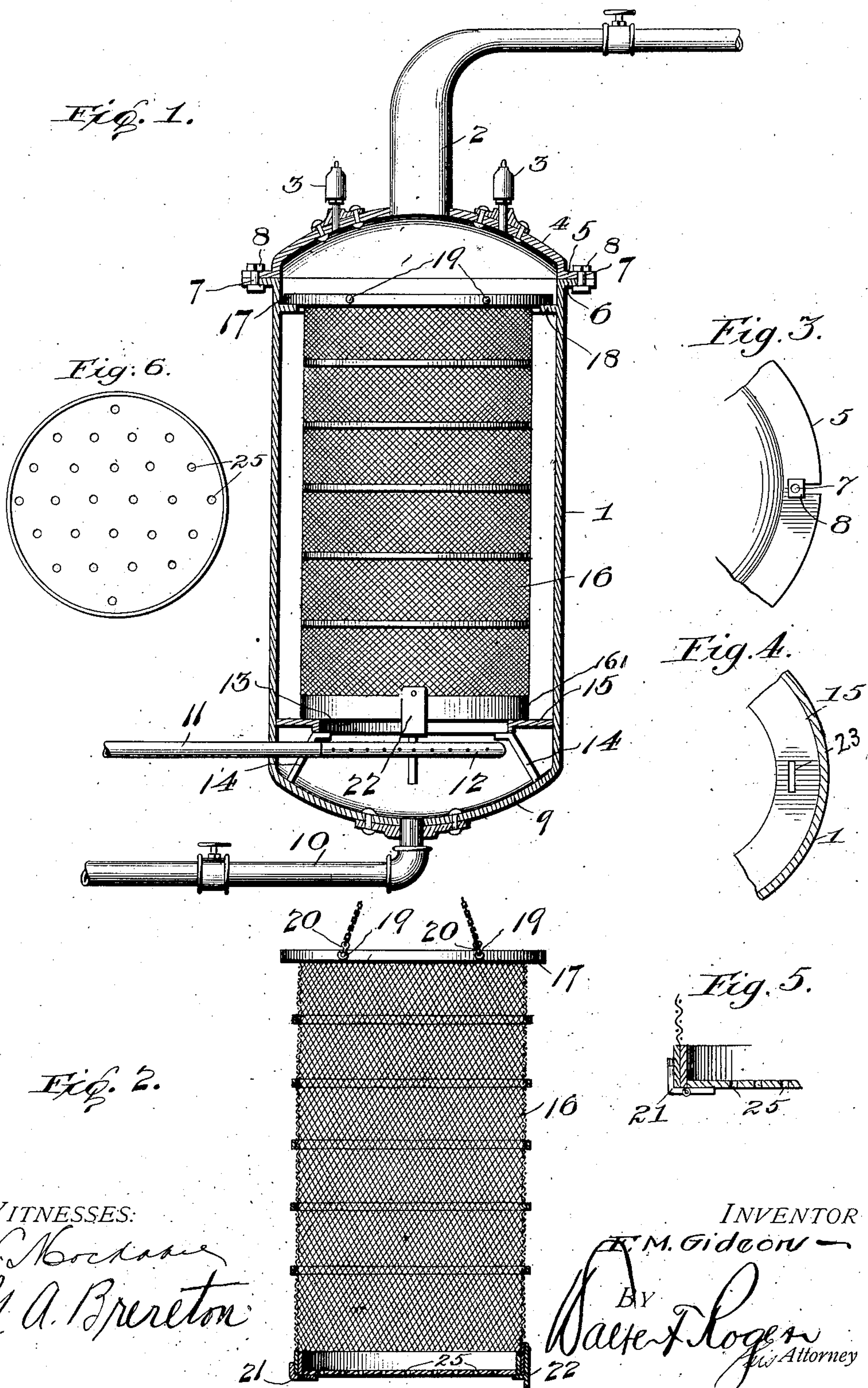


No. 832,311.

PATENTED OCT. 2, 1906.

F. M. GIDEON.
TURPENTINE STILL.
APPLICATION FILED JUNE 10, 1904.



WITNESSES:

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FRANCIS M. GIDEON, OF BALLSTON, VIRGINIA.

TURPENTINE-STILL.

No. 832,311.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed June 10, 1904. Serial No. 212,000.

To all whom it may concern:

Be it known that I, FRANCIS M. GIDEON, a citizen of the United States, residing at Ballston, in the county of Alexandria and State of Virginia, have invented certain new and useful Improvements in Turpentine-Stills; and I 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.

My invention relates to turpentine stills or digesters. Its object is to provide a still especially applicable to the distillation of turpentine and production of rosin and other products by the action of steam on chips or prepared wood and to facilitate the rapid application of the feed of chips to the digester and the removal of the residue after the operation of distillation is completed.

To this end it comprises, essentially, a still or digester, means for introducing steam so as to thoroughly disseminate the steam throughout the chips, means for collecting the products, and means for placing the chips in a body within the digester and removing them in a body.

In the accompanying drawings, Figure 1 is a longitudinal section with part in perspective; and Fig. 2 is a detail elevation of the basket, showing adaptability for removal and replacement. Figs. 3, 4, 5, and 6 are details.

In the drawings, 1 represents the body of the still or digester, 2 the neck, and 3 governing or escape valves located in the movable head or dome 4. This dome or head is flanged at 5 and rests upon a flange 6 on the top of the digester, being secured in place primarily by a series of slip-bolts 7, provided with nuts 8. These bolts 7 are set into slots provided in the flanges 5 and 6, Figs. 1 and 3, thus rendering it easy to remove said bolts when it is wished to separate the cover 4 from the digester 1.

9 is the bottom of the digester, and 10 is a valved escape-pipe which carries off the residuum, resinous, and other heavy matters not vaporized, which are gathered in the lower part of the digester. 11 is a steam-pipe leading into the digester and terminating in a coil 12. 13 is a ring supported by braces 14 from the bottom of the digester and having a flange 15 extending out to the side of the digester. 16 is a basket as illustrated a wire basket,

hung at the top from a ring 17 upon a ring 18, secured to the wall of the digester. The bottom 161 of the basket when in place rests upon the flange 15 of the ring 13 at the bottom of the digester and is perforated to permit the passage of the steam, as indicated at 25 in Fig. 6. This arrangement provides a steam-space at the bottom of the digester, the outlet for the steam being through the perforations 25 in the bottom of the basket. The ring at the head of the basket bears on its side a series of lugs 19, which are adapted to be engaged by a series of hook devices 20 and lifted by a crane or other device and carried over to a trolley, upon which it travels, as shown in detail in Fig. 4. The ring 15 is provided with a perforation 23 for the purpose of receiving the catch 22 when the basket is positioned. The bottom of the basket is hinged at 21 and has a spring-catch 22 so arranged that as the basket travels down the trolley or other carrier of my system when the catch 22 strikes a projection it will be pushed back, permitting the contents of the basket to be at once discharged, whereupon the basket may be again filled and returned to the digester. It is obvious that the filling of this basket may be by any of the plans I have adopted in my system, such as suction or a chain-carrying device, so that it obviously may be rapidly filled and rapidly returned to the digester and put in place at once.

Having thus fully described my invention, what I claim as new is—

1. The combination in a turpentine-still, of a wire or similar basket suspended within the still from the top, a support near the bottom of the still, a perforated bottom for the basket engaging said support, a steam-pipe disposed in the still at a point below the level of the bottom of the basket and a movable head for the still.

2. The combination in a turpentine-still, of a wire or similar basket suspended within the still from the top, a support near the bottom of the still, a perforated bottom for the basket engaging said support, a steam-pipe disposed in the still below the level of the bottom of the basket, a movable head for the still and means on the basket for engaging suitable lifting or removing means.

3. The combination in a turpentine-still, of a wire or similar basket, means for suspend-

ing the basket within the still, a support near
the bottom of the still, a perforated or wire
hinged bottom on the basket engaging said
support, a catch for holding the bottom in
5 place on the basket and means on the bas-
ket for engaging suitable lifting or removing
means.

In testimony whereof I affix my signature
in presence of two witnesses.

FRANCIS M. GIDEON.

Witnesses:

RUFUS H. THAYER,
G. A. BRERETON.