A. C. BLOUNT.

Turpentine Still.

No. 12,812. Patented May 8, 1855.

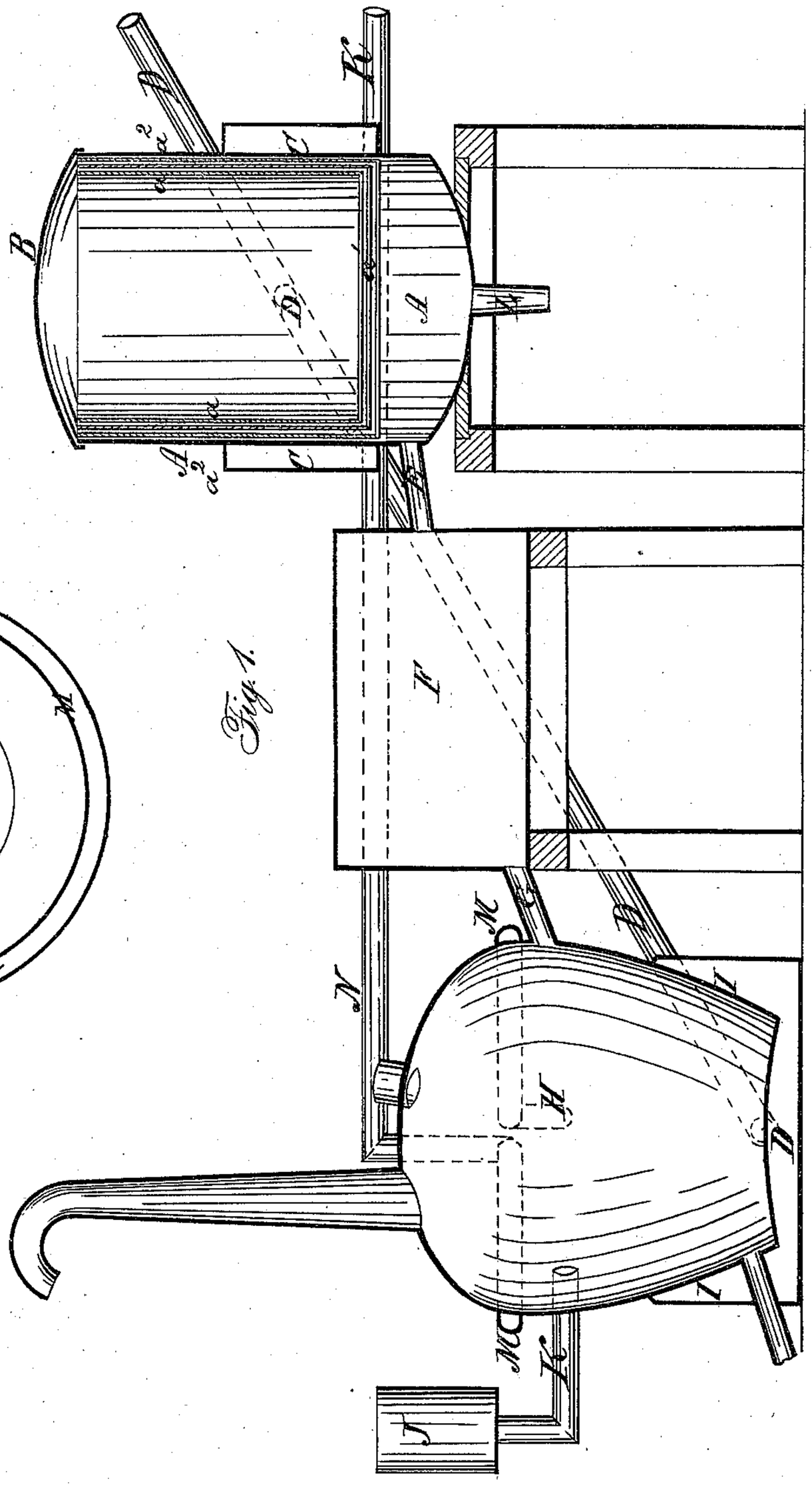

Fig. 1.

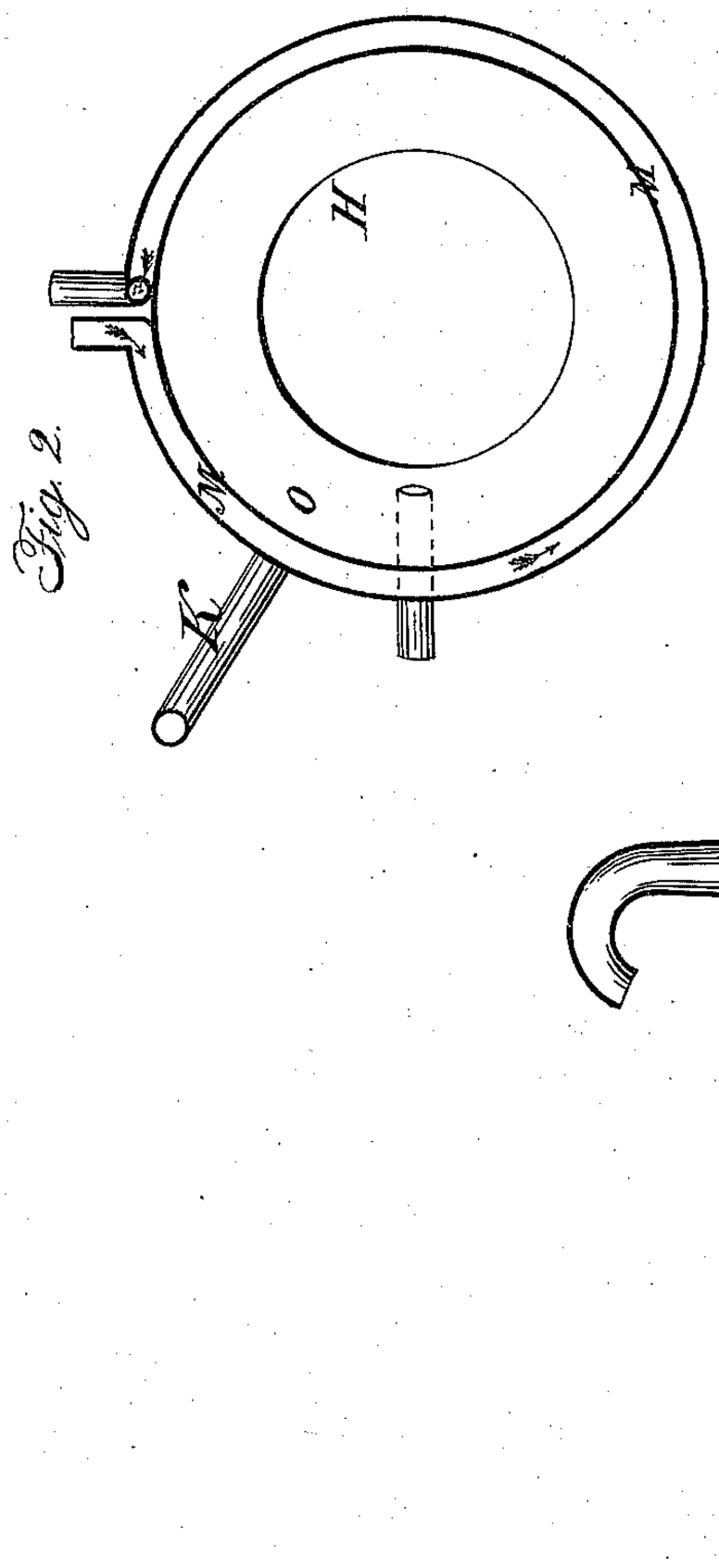

Fig. 2.

UNITED STATES PATENT OFFICE.

ALEXANDER C. BLOUNT, OF MOUNT PLEASANT, ALABAMA.

IMPROVEMENT IN PREPARING TURPENTINE FOR DISTILLATION.

Specification forming part of Letters Patent No. **12,812**, dated May 8, 1855.

To all whom it may concern:

Be it known that I, ALEXANDER C. BLOUNT, of Mount Pleasant, in the county of Monroe and State of Alabama, have invented certain new and useful Improvements in Apparatus for Distilling Turpentine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of an apparatus constructed according to my invention, and Fig. 2 is a horizontal section of the still.

Similar letters of reference indicate corresponding parts in both figures.

These improvements have for their object the production of white or first-quality rosin from inferior qualities of crude turpentine.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A is a large iron cylinder, having its bottom concave internally, and having a lid, B, capable of being removed at pleasure. This cylinder is surrounded by a steam-jacket, C, supplied with steam by a pipe, D, for the purpose of heating it, and it contains three cylindrical wire sieves, a a' a^2, placed one within the other, the innermost of said sieves being the coarsest and the outermost one the finest.

From the lower part of the cylinder A a pipe, E, leads downward to a receiver, F, which may be made of boards well put together, and from this receiver F a pipe, G, leads downward to the still H, which is surrounded and heated by a steam-jacket, I, supplied by the pipe D.

J is a retort for generating oxygen or some other decolorizing agent, which will not inflame the spirit to be admitted to the still H through a pipe, K. The crude turpentine is placed in the innermost, a, of the sieves in the cylinder A, where the heat should be sufficient to melt it, and before any spirit can escape it will run out at the pipe E into the receiver F. The dirt and impurities which are not arrested in the sieves a a' a^2 subside and form a sediment in the concave bottom of the cylinder, from whence they are drawn off, when desirable, by a pipe, L, which should be provided with a cock or valve to open and close it, and the turpentine passes through the pipe E quite freed from chips, bark, straw, dirt, and foreign matter. From the receiver F it is drawn off as required into the still H, in which, by the proper admission of steam to the jacket I, a temperature of not more than 220° Fahrenheit is maintained, by which the spirit is run off without developing empyreumatic acid. During the distillation I admit atmospheric air or oxygen, or other decolorizing agent from the retort J. The oxygen or decolorizing agent may be forced in by its own pressure, or by a pump or other forcing apparatus. By thus freeing the crude turpentine from all impurities before admitting it to the still, distilling at a low and equable temperature, and admitting a decolorizing agent during the distilling process, white or first-quality rosin is made.

The manner in which I prevent the boiling over of the contents of the still is by running round the upper part of the still a pipe, M, which is connected with the cold-water pipe N, which supplies the condenser. When the turpentine boils up and threatens to boil over, I open this pipe, to let a stream of cold water round the still, and as soon as the boiling turpentine strikes the cold surface of the pipe of that part of the still round which the pipe runs it is condensed and the ebullition ceases, the turpentine subsides, and the danger is over.

The pipe M may be either outside the still, as shown, or inside.

What I claim as my invention, and desire to secure by Letters Patent, is—

Freeing the crude turpentine of chips, bark, straw, and other impurities and coloring-matters before introducing it to the still, by melting it in a cylinder or vessel, A, which contains one or more sieves, a a' a^2, and is arranged in such manner that the melted turpentine may run from it to the still by gravitation, substantially as herein described.

ALEXANDER C. BLOUNT.

Witnesses:

J. W. ANDERSON,

JASON STAPLES.