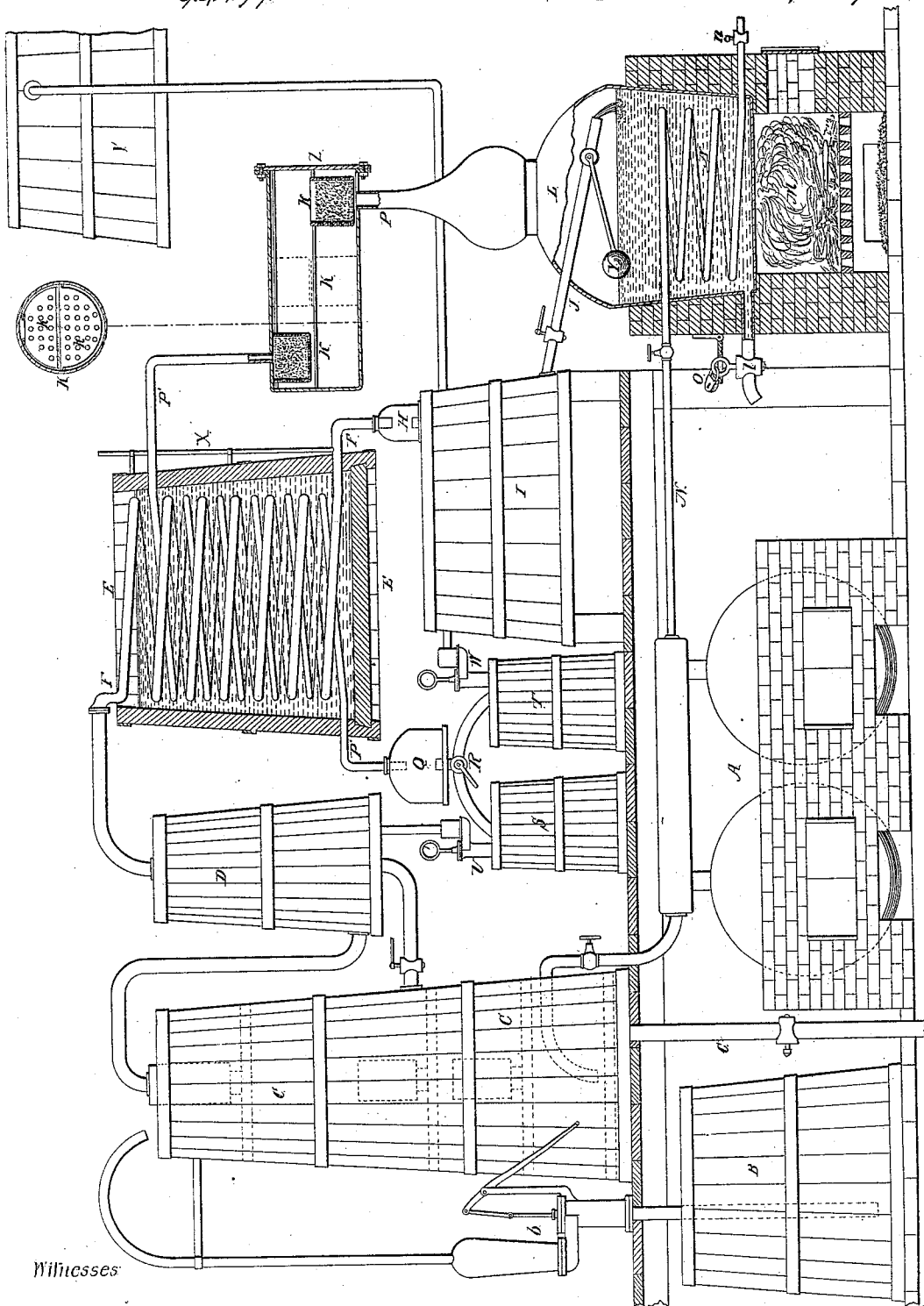


W. & G. W. Robson
Alcohol Still

No. 94,477

Patented Jul 13, 1869.



Witnesses

Saml. H. ...
John H. ...

Inventors: *W. & G. W. Robson*
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United States Patent Office.

WILLIAM ROBSON AND GEORGE W. ROBSON, OF CINCINNATI, OHIO.

Letters Patent No. 92,477, dated July 13, 1869.

IMPROVEMENT IN STILLS FOR ALCOHOLIC SPIRITS.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that we, WILLIAM ROBSON and GEORGE W. ROBSON, both of Cincinnati, Hamilton county, Ohio, have invented a certain new and useful Improvement in Stills; and we hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

This invention has for its object the economical, rapid, and effective manufacture of superior proof-spirit, by double but continuous distillation, first, with steam alone, forming low-wine, and, secondly, with fire, or with steam and fire combined, forming finished spirit; and

The first part of our invention consists in the combination, with a customary steam-heated doubling-still, of a "copper still," so constructed and arranged as to receive heat from a furnace beneath it, either in conjunction with a steam-heater, or otherwise; secondly, automatic and other contrivances, for maintaining a proper supply of low-wine in the finishing-still, and the proper observation and distribution of the low and high-wines, as the work progresses.

The accompanying drawing is a partially-sectionized elevation of a distilling-apparatus, embodying our invention, the different vessels being arranged in one plane, for convenience of illustration.

We employ, in our process, a common steam-heated distillery, having the customary steam-generator or boiler A, wort-tun and pump B b, steam-heated still C, doubler D, flake-stand or worm-tub E, and low-wine worm F.

Proceeding from the bottom of the still C, is the customary slop-pipe c.

The low-wine worm F discharges into a tester-glass, H, which empties into the close tank or reservoir I, from whose bottom a pipe, J, leads into the upper part of a copper still, L, having beneath it a furnace, M, and, traversing its lower portion, a steam-pipe, N, having, outside of the still-body, a discharge-cock, n.

Leading from the bottom of the still-body, is a cock, l, having a lock, o, which may be under control of the superintendent or of the Government supervisor.

P is a pipe, from the top of the copper still L, which pipe enters the bottom of the drum K, from whose upper portion there emerges another pipe, that, in the form of a worm, P', traverses the same flake-stand that contains the low-wine worm F, and said pipe or worm P' discharges into a tester-glass, Q, provided with a two-way cock, R, for discharging into the low-wine receiver S, or into the high-wine receiver T, according to the observed condition of the liquor in the tester.

From the low-wine receiver S, the liquor is, from time to time, returned to the doubler D, by means of pump U, and, from the high-wine receiver T, is for-

warded to the whiskey-house tank V, by means of pump W.

X is a gas-vent, from tail of worm, in connection with which a customary water-trap, not shown, is employed.

A ball-cock, Y, to the delivery-end of the pipe J, acts automatically, to maintain the proper supply of liquor in the copper still, the level and temperature of said liquor being made known by any customary indicators.

The drum K may be provided with slides, for the support of removable colanders, k, to hold juniper-berries, coriander-seeds, peach-pits, or other flavoring-matters. By a removable head or door, Z, access is had to the colanders k.

The chief use of the steam-heater N is to start the boiling-action in the finishing-still, at the commencement of a run, so as to save time, after which it may be shut off.

We have described the preferred form of our invention, but reserve the right to vary the same in non-essential particulars. For example, the drum K may be omitted, and the two worms may have separate tubs, if desired. A meter may be used in place of or in conjunction with the tester Q. Instead of the two-way cock, there may be a separate cock to each receiver, and the steam-pipe or coil may be omitted from the finishing-still.

We claim herein as new, and of our invention—

1. The described double distillation, first, with the ordinary steam-distillery, and, secondly, with the finishing-still L, of copper, heated by fire, or by fire and steam combined.

2. The close low-wine tank or reservoir I, between the steam-distilling worm-tub and the copper or finishing-still, to receive the low-wine from the steam or other primary distillation, and to deliver the same into the said finishing-still.

3. While disclaiming the general principle of introducing purifying or flavoring-matters between the still and condenser, we claim the construction and arrangement of the drum K, and removable colanders k k, as and for the purposes herein shown and described.

4. The low-wine worm F, reservoir I, finishing-still L, high-wine worm P', tester or separator Q, and low and high-wine receivers S and T, with their described or equivalent accessories, the whole being combined and operating substantially as set forth.

In testimony of which invention, we hereunto set our hands.

WILLIAM ROBSON.
GEORGE W. ROBSON.

Witnesses:

GEO. H. KNIGHT,
JAMES H. LAYMAN.