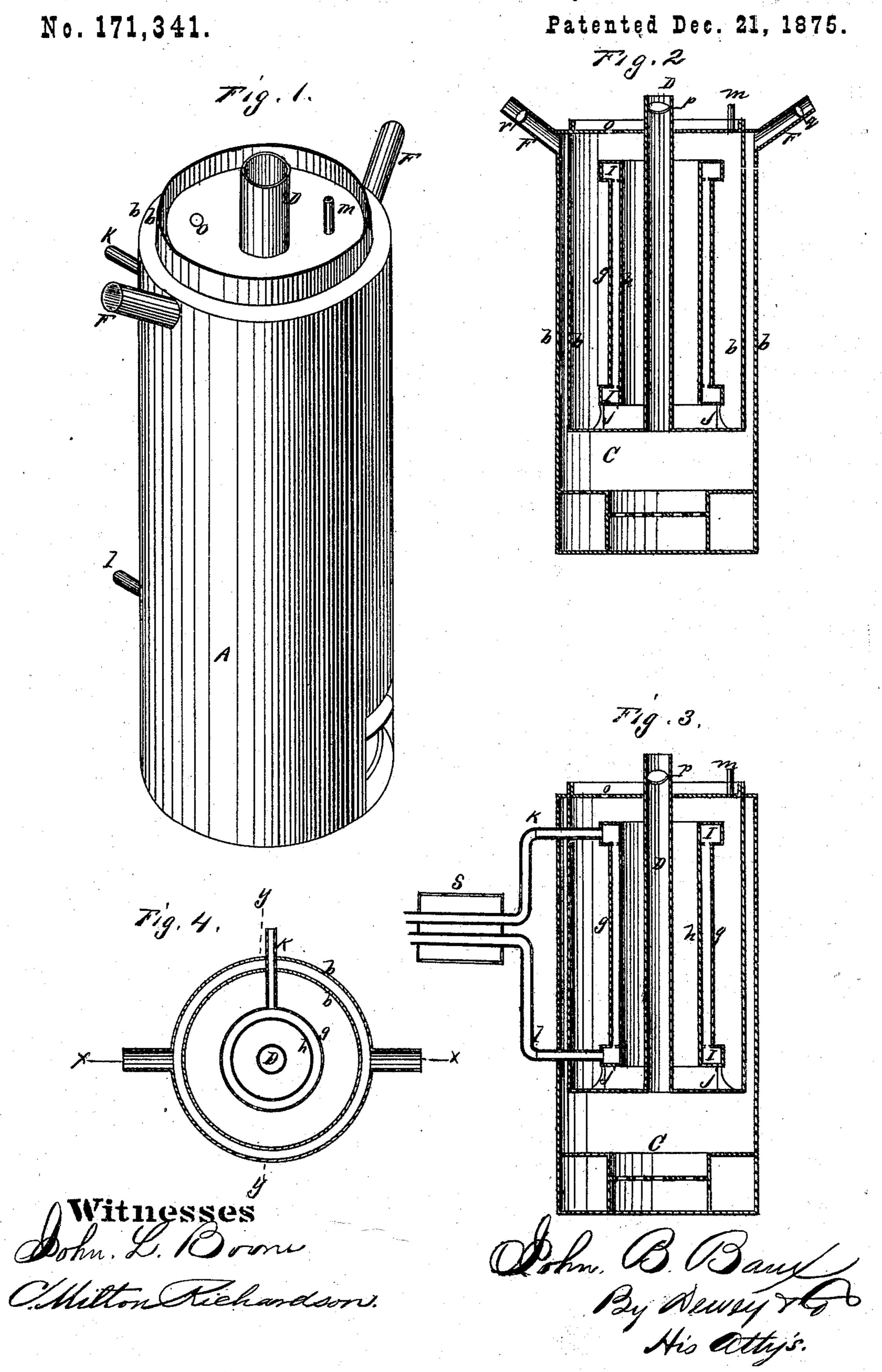
J. B. BAUX.

## APPARATUS FOR AGING LIQUORS.



## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN APPARATUS FOR AGING LIQUORS.

Specification forming part of Letters Patent No. 171,341, dated December 21, 1875; application filed October 25, 1875.

To all whom it may concern:

Be it known that I, John B. Baux, of Oakland, Alameda county, State of California, have invented an Improved Apparatus for Heating Wines; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to an improved apparatus for heating wines and liquors in order to impart to them the quality which is known as age, and to prevent secondary fermentation.

My improvement consists in certain details of apparatus, as will be more fully hereinafter described.

In order to more fully illustrate my invention, reference is had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a perspective view of my device. Fig. 2 is a vertical section taken through x x, Fig. 4. Fig. 3 is a section taken through y y, Fig. 4. Fig. 4 is a transverse section.

A is an upright furnace and heater, having double outside walls, b b, leaving a space between them, which space communicates with the fire-place C below. A stack or chimney, D, extends upward from over the fire-place, and passes directly up through the center of the furnace A, extending a distance above it. Side flues F F branch off from the upper end of the flue-space between the walls b, and communicate with the chimney or stack D near its top, in the manner shown. This arrangement of flues permits the heat from the furnace to pass up through the center and around the outer walls of the heating apparatus, so as to heat whatever is contained between them. gh are two metallic cylinders, one of which is a little larger than the other, so that when the smaller is placed inside of the larger a very narrow space will be left between them. These cylinders, when thus placed together, have secured to them, both at their tops and bottoms, a hollow annular ring or reservoir, I, with which the space between them communicates. These cylinders

are short enough to sit inside of the heater, so as to surround the chimney or stack midway the wall and stack. The lower reservoir I has short legs j, which support the two cylinders and their reservoirs above the bottom of the heater. The spaces between the outer walls b of the heater and outside of the cylinders, and also the space between the inside of the cylinders and stack D, are kept filled with water, which is readily heated to the required temperature by means of the surrounding flues, which communicate with the fire-place.

The wine to be heated is introduced into the upper annular reservoir I through the pipe K, and passes down between the heated cylinders g h, being heated during its passage to the required degree. After passing into the lower reservoir I, the wine passes up the pipe l and out of the machine. m is a tube, which is provided with a cock, through which the steam generated in the heater can pass out, and o is the opening through which the water is introduced into the machine.

In order to properly regulate the heat a damper, p, is placed in the chimney or stack, and other dampers, q r, in the branch flues, which lead from the wall-flues, so that by means of these dampers the heat can be controlled and regulated as desired.

In order to give a more extended heatingsurface for the wine, the cylinders gh, or either of them, may be corrugated, and to prevent the collapsing of the two cylinders when the liquid is withdrawn, braces can be employed to keep them apart.

S is a cooler and heater, through which the wine-pipes K and l pass just outside of the machine, so that the outgoing liquid will be cooled by the ingoing liquid, and that which has been heated will heat that which is passing in, thus utilizing the heat in the liquid which has already passed through the machine for imparting initiatory heat to that which is passing in.

The chief advantage of this machine over others of its class is its simplicity and the ease with which it can be cleansed. By making the cylinders plain, or even simply corrugated, no difficulty will be experienced in keeping them perfectly clean.

I am aware that heating wines in a waterbath has heretofore been practiced in order to age them; this I do not claim; but, Having thus described my invention, what

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

The plain or corrugated concentric cylinders gh, with their reservoirs II, in combination with the heater A, with its centrally-arranged

stack D, side flues F F, and pipes K l, all combined and arranged as and for the purpose above described.

In witness whereof I hereunto set my hand and seal.

JOHN B. BAUX. [L. s.]

Witnesses:

John L. Boone, C. M. Richardson.