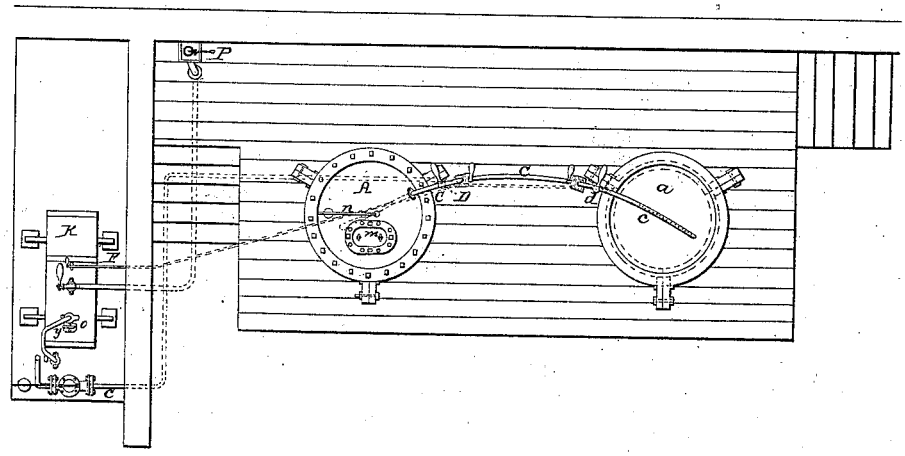
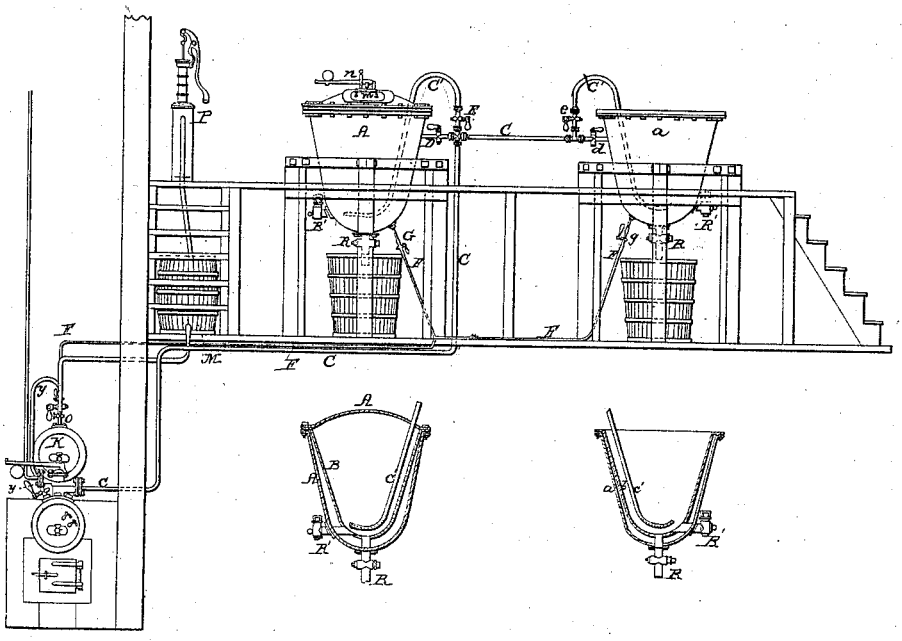
L. Montrop,

Rendering Apparatus.

No. 2,694. Patented June 27, 1842.





UNITED STATES PATENT OFFICE.

L. MONTROP, OF BALTIMORE, MARYLAND.

RENDERING TALLOW.

Specification of Letters Patent No. 2,694, dated June 27, 1842.

To all whom it may concern:

Be it known that I, L. MONTROP, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement in Melting and Rendering Tallow and other Fatty Substances; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which the letters of reference are the same in the plan, elevation, and sections.

The nature of my invention consists in melting rough tallow in the shortest and most economical manner by steam, depriving all the membranous parts of all the fat contained therein and rendering the use of the press unnecessary, by which method the tallow yields nearly 10 pr. ct. more rendering than by the ordinary process, and of a far better quality.

The machine used for this purpose consists of an outer kettle (A, or *a*) of any convenient form having a flange around the top on which the rim of an inner kettle (B or *b*) rests; this kettle is of somewhat smaller capacity than the outside one leaving a space between them all around; over this a cover fits which is tightly screwed down and confines the whole together; in this cover there is a man-hole (*m*) and safety valve (*n*) of the usual form, this apparatus having a suitable frame to sustain it is placed in the second story of the building and below it on the first floor is situated, in the proper relative position, a steam boiler of common construction from which proceeds a steam pipe (*c*,) up to the kettles above named and opens into the space between them just below the flange this pipe is furnished with a stop-cock D, near the kettle for regulating the heat applied to the kettles from the pipe (*c*) a branch pipe (*c'*) rises above the kettles and is then curved downward through the cover extending to the bottom of the inner kettle where it has a horizontal turn; this part being perforated with small holes admits the steam freely into the kettle; this pipe is also furnished with a stop cock E; from near the bottom of the outer kettle (A) a pipe (F) leads down to a hot-well (K) placed on the top of the boiler from which the boiler is supplied with water. The pipe (F) is for the purpose of drawing off the condensed steam; there is a reservoir (M) placed on the second floor from whence a pipe leads to the hot well and serves to supply it with water; which is raised into the reservoir by a pump (P) the water is forced from the hot well by the pressure of the steam into the boiler by means of a tube (*y*) leading from the top of the boiler into the upper part of the hot well, (*o*) is an atmospheric cock placed in the top of the hot well. A series of kettles can if desired, be placed side by side having pipes as before described leading into them those for refining the tallow are constructed without the cover (see *a*) in all other respects they are like the others.

Under each of the kettles is placed a tub into which the stop-cock (R) from the inner kettle leads for the purpose of emptying its contents there is also another one (R') on the side for the same purpose.

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

1. The combined use of the steam introduced into the kettle in which the tallow is melted, and around it between the kettles, thus melting the tallow under high pressure in the manner above described.

2. I also claim in combination with this apparatus the hot-well (K) constructed and arranged as herein set forth.

L. MONTROP.

Witnesses:
J. H. GODDARD,
J. J. GREENOUGH.