S. PAGE.

Evaporating Pan.

No. 66,037. Patented June 25, 1867.

FIG. 1

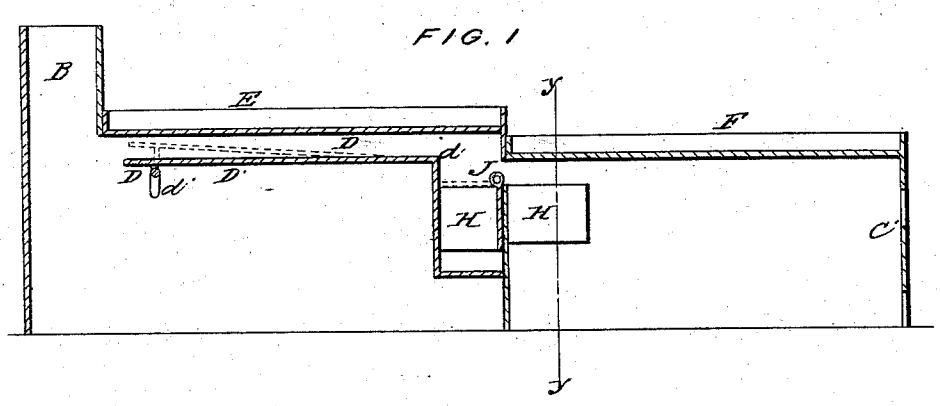
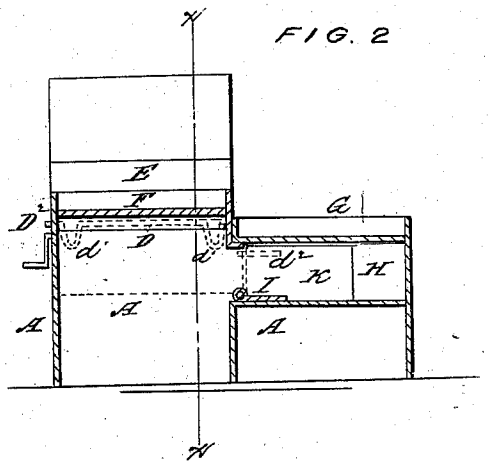


FIG. 2



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Letters Patent No. 66,037, *dated June* 25, 1867.

IMPROVED EVAPORATING-PANS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL PAGE, of McAllisterville, in the county of Juniata, and State of Pennsylvania, have invented a new and useful improvement in Evaporators; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, reference being had to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is a longitudinal section of an evaporator illustrating my invention, the line *x x*, fig. 2, indicating the plane of section.

Figure 2 is a transverse section of the same at the line *y y*, fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

In this evaporator an adjustable plate or bottom is arranged beneath the receiving or skimming-pan in such a manner that the heating flue of the latter may be enlarged or contracted so as to increase or diminish the heat as occasion may require. The finishing-pan rests upon the walls of a chamber arranged at one side of the main flue, and a novel arrangement of dampers controls the heat within said chamber or excludes it entirely therefrom, as may be desired.

The following description will enable others skilled in the art to which my invention appertains to fully understand and use the same.

A A are the walls of the evaporator, and B the chimney or discharge-flue, the fire-box being located at the end C. D is the flue through which the heated products of combustion are conducted to the chimney B. This flue extends beneath the receiving or skimming-pan E, which is located between the boiling-pan F and the chimney B. The plate D^1 forms the bottom of the flue D, whilst the bottom of pan E forms the top of said flue. The said plate D^1 is pivoted at the end *d*, and at its opposite end rests upon the rod D^2, which is bent so as to form the two knees d^1 d^1. By turning the handle (indicated by dotted lines at d^2, fig. 2,) the knees d^1, d^1 of the rod D^2 may be brought in contact with the under surface of the plate D^1, and by this means the latter may be raised, as indicated by the red lines in fig. 1, so as to gradually contract the flue D toward its discharge end, which is done for the purpose of retaining the heat in said flue when it is desirable to apply an increased amount of heat to the pan E. By means of the rod D^2 the movable flue-plate D^1 may be adjusted so as to increase or diminish, to any desired extent, the heat which is applied to the pan E. G is the finishing-pan, which is supported upon the walls of the chamber H. By means of the damper I, fig. 1, and the damper J, fig. 2, the heat may be allowed free access to and egress from the chamber H of the finishing-pan G, or these dampers may be made to shut off the heat from said chamber by closing the communication of the latter with the fire-chamber C and flue D, as indicated by the red lines in the drawings. Thus, when the evaporating process in the finishing-pan G has been completed, the heat may be withdrawn from the latter while evaporation is in steady progress in the pans E F, and the heat in the latter undiminished. The plate K projects centrally into the chamber H, and causes a reverberation of heat therein.

Having thus described my invention, the following is what I claim as new herein, and desire to secure by Letters Patent:

1. I claim the adjustable plate D^1 arranged as herein described, and employed to vary the size of the flue beneath the receiving or skimming-pan in the manner and for the purpose specified.

2. I claim the combination, with the finishing-pan G and chamber H, of the dampers I J, arranged and operating in the manner and for the purpose set forth.

SAMUEL PAGE.

Witnesses:

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