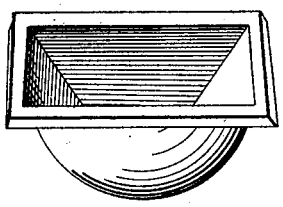
C. C. P. Crosby,

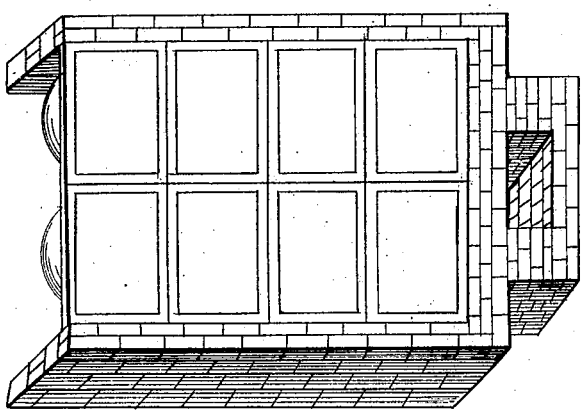
Evaporating Pan,

No. 1,471. Patented Jan. 11, 1840.

No. 1.



No. 2.



UNITED STATES PATENT OFFICE.

CHS. C. P. CROSBY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN THE MODE OF CONSTRUCTING AND SETTING SALT-KETTLES.

Specification forming part of Letters Patent No. **1,471**, dated January 11, 1840.

To all whom it may concern:

Be it known that I, CHS. C. P. CROSBY, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in the Mode of Constructing and Setting Salt-Kettles, of which the following is a specification.

The general nature of invention or improvement is the use of iron or copper kettles having a square or parallelogram form at the top or upper edge, with a round or oval bottom; also, in setting two or more rows of kettles in an arch or furnace with no middle wall or partition of brick or stone; also, in casting the kettles of less width than length, so that more kettles, each of the same contents, can be placed in an arch or furnace between the fire-furnace and the chimney than can be of round kettles.

To be more particular in this specification, I cause my kettles to be made so as to contain about one hundred and twenty gallons each, and instead of being hemispherical I have only the lower part of the kettle concave, round, or oval, and the sides carried up by four groins to the usual height, so as to make a square or parallelogram form at the top. On the outside of the upper edge I cast or attach a flange or rim or shoulder-piece, in order to strengthen the sides and form the means of suspending the kettle in the furnace or arch. It is better, but not necessary, for this flange or rim to go round on each side; and into two of the ends or sides I cast a hole of an inch in diameter, to aid in putting a hook or bolt to set or suspend the kettle. (See Figure 1 of drawings.)

In setting these kettles in the arch or furnace, I build two stout parallel walls of brick or stone, of a suitable height to suspend two rows of kettles, and leave a flue for heat and smoke below them, and these walls are to be sufficiently distant from each other to permit the flanges or rims on the ends or sides of two of these kettles placed opposite each other to rest on the upper part of the walls, while the other two ends or sides meet in the center, so as to form an arch, and the distance between the walls being accurately calculated and raised to a perfect level, the kettles will support themselves; or they may be held by chains from a timber above, or by iron posts and bars below, or by an iron bolt inserted in the holes of two kettles near the rim, (see Fig. 2;) but this mode of suspending them I do not claim. If the kettles are four feet long and three feet wide, the walls should be seven feet and eight inches distant, and then the kettles should be placed end to end and side by side the whole length of the arch. If the arch is about eighty feet long it will contain fifty of these kettles between the fire-place and the chimney, which, if the whole is properly constructed, by the use of grates and bars, will evaporate eight thousand gallons of water by the use of four cords of good wood, being an increase of one-third over the product of an arch of eighty feet filled with round kettles.

What I claim, and wish to secure by Letters Patent, is—

The mode of constructing the kettles as herein described—viz., by making the bottom of the kettle round or ovoid, and the top square or a parallelogram, the sides at the edge being straight, with a flange or rim on each side of sufficient thickness to give strength and support to the kettle—say of about two inches—in combination with the method of setting the kettles in an arch or furnace, as herein set forth, by which more kettles can be set in a furnace of any given length than where the kettles are round or hemispherical.

CHS. C. P. CROSBY.

Witnesses:
C. H. MILEBERGER,
PETER FORD.