

B. TANNER.

Improvement in Apparatus for Draining and Cooling Sugar.

No. 127,528.

Patented June 4, 1872.

Fig. 1.

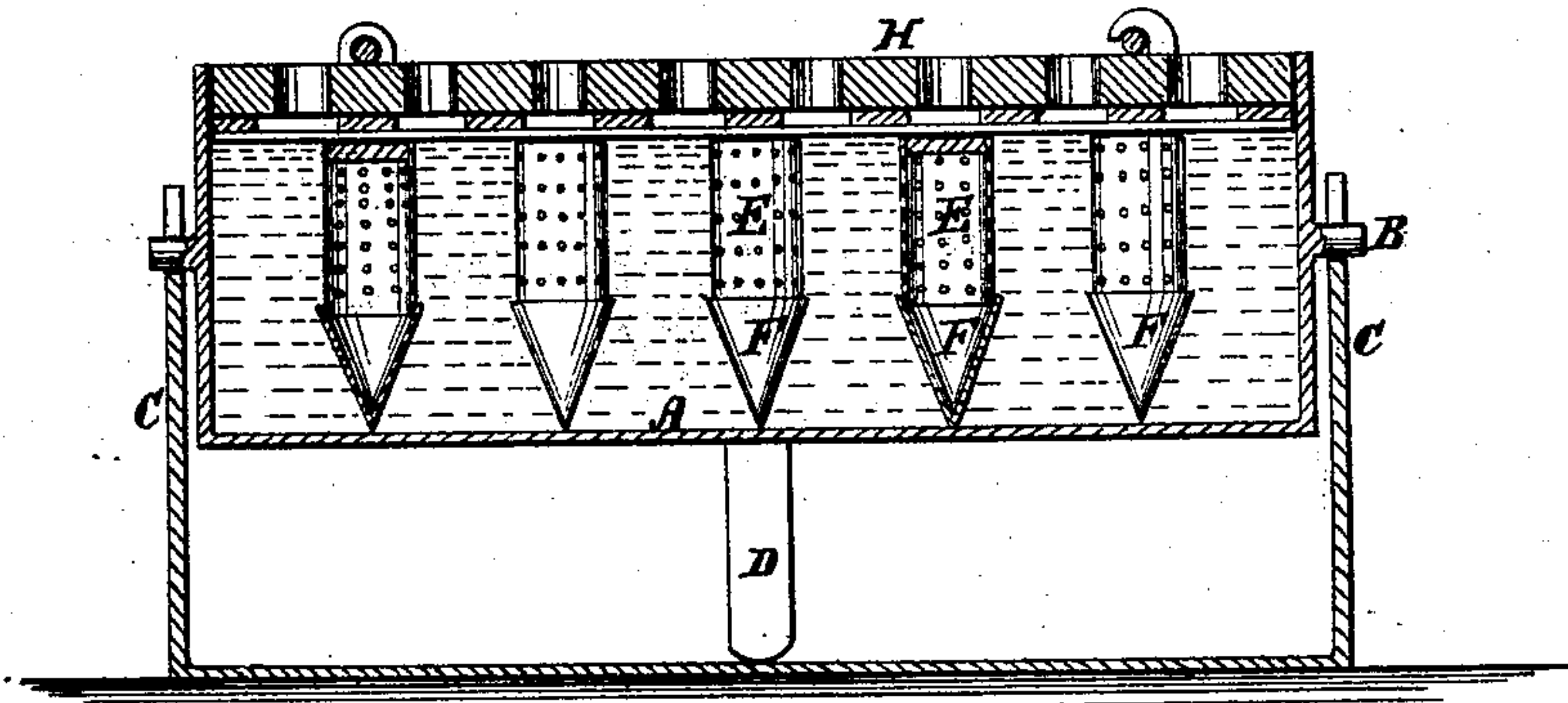


Fig. 2.

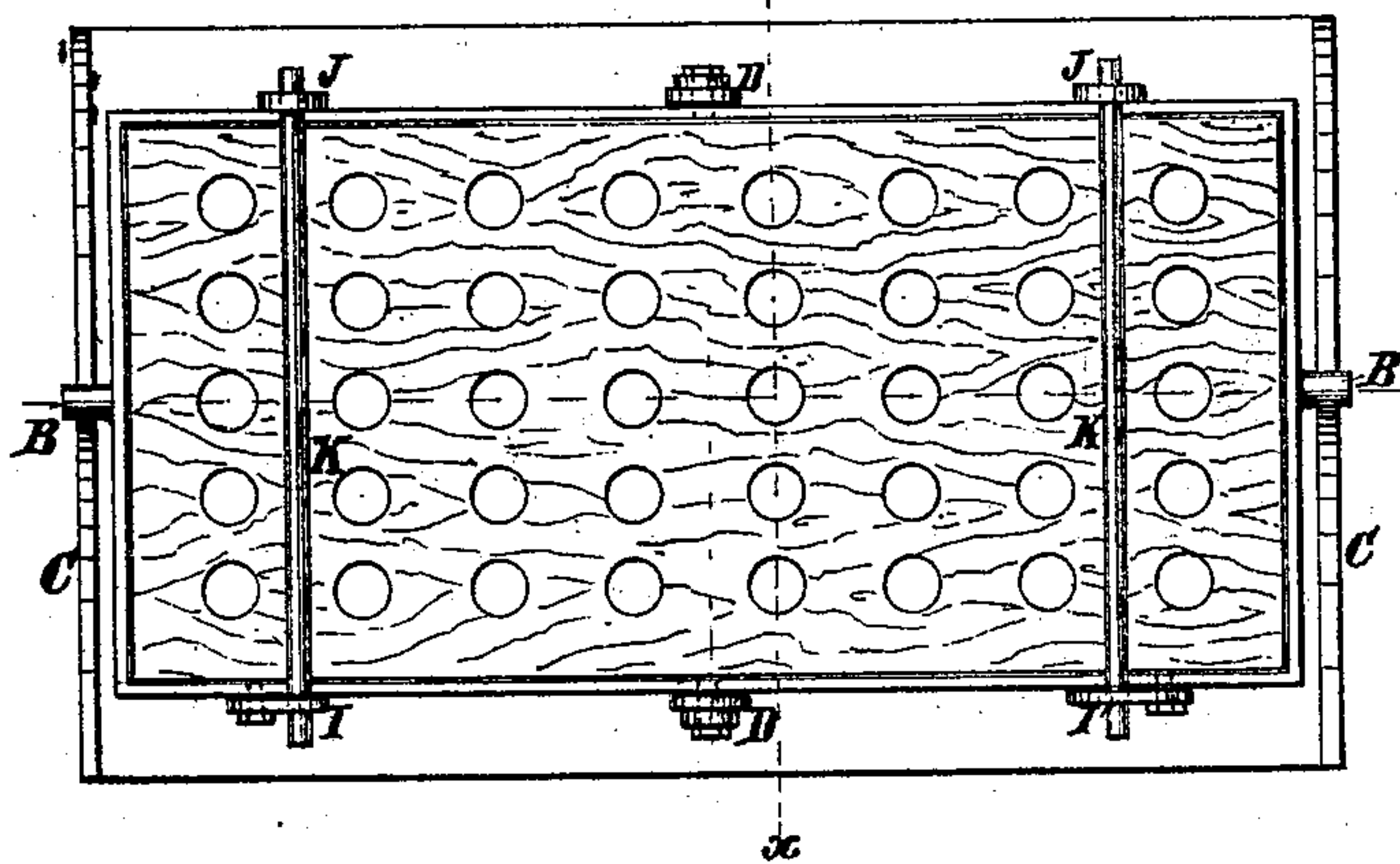


Fig. 3.

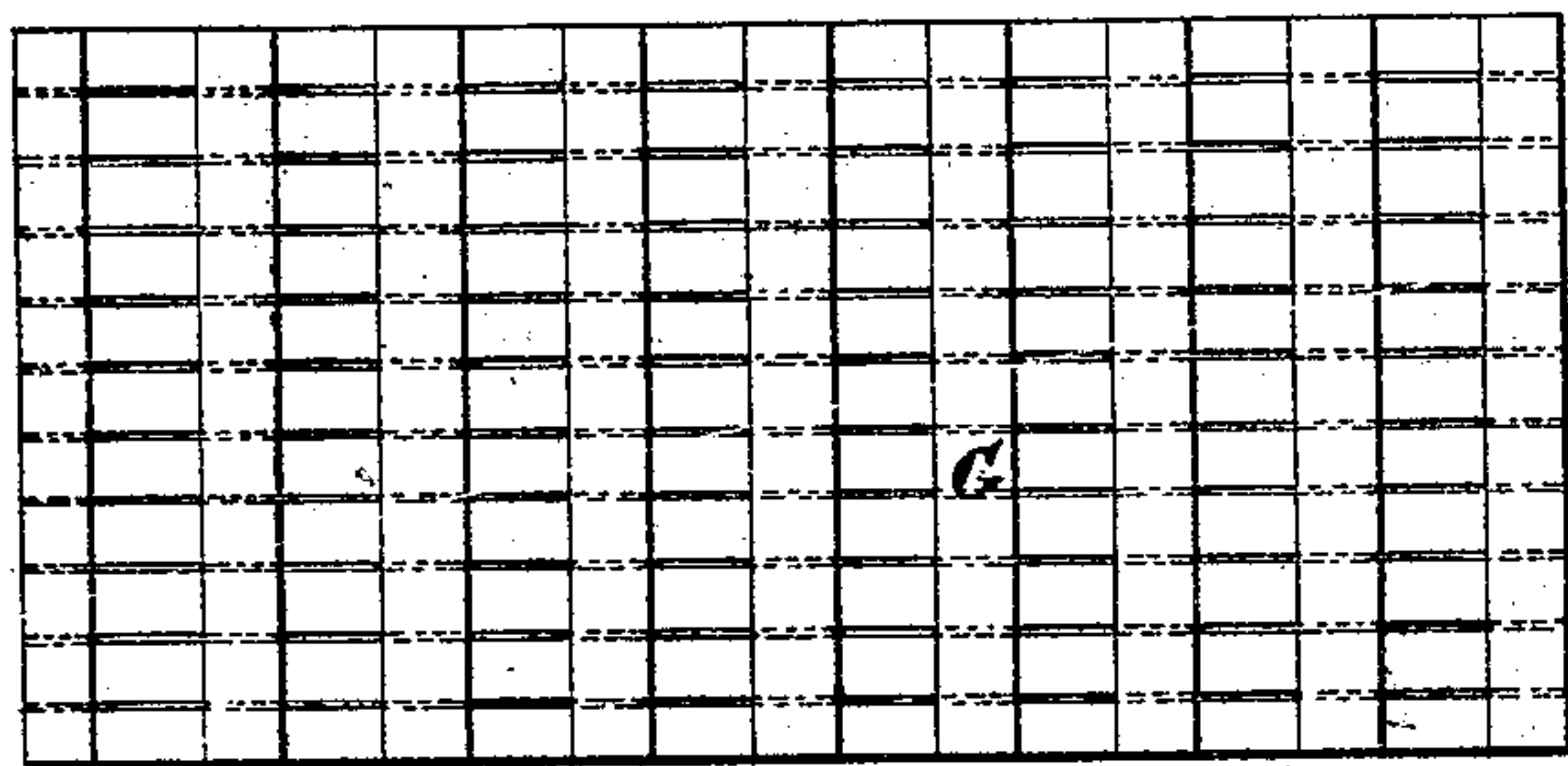
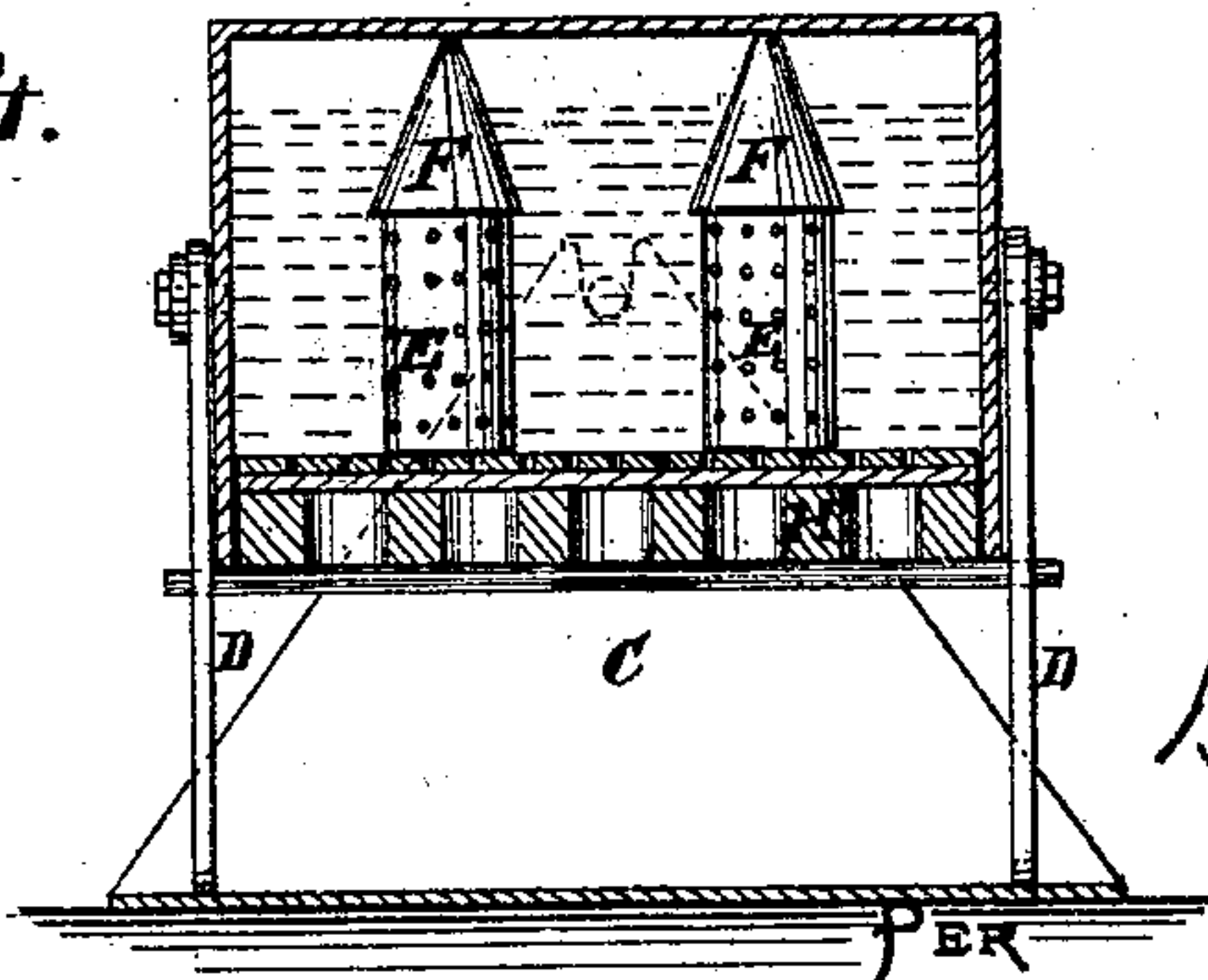


Fig. 4.



Witnesses:

A Benneventorf.
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UNITED STATES PATENT OFFICE.

BRANCH TANNER, OF CHENEYVILLE, LOUISIANA.

IMPROVEMENT IN APPARATUS FOR DRAINING AND COOLING SUGARS.

Specification forming part of Letters Patent No. 127,528, dated June 4, 1872.

Specification describing a new and Improved Sugar Cooling and Draining Apparatus combined, invented by BRANCH TANNER, of Cheneyville, in the parish of Rapides and State of Louisiana.

My invention consists of an open case or cooler mounted on trunnions so that it can be turned upside down; a perforated straining cover therefor, and perforated hollow tubes with conical ends, which I use for first cooling the hot sugar, and then straining out the molasses, by first placing the hot cooked sugar in the cooler and allowing it to stand uncovered until cool; then I insert the perforated tubes in the sugar by forcing the conical ends downward to the bottom, distributing the said tubes equally throughout the mass; apply the perforated straining-cover to retain the grains of sugar while allowing the molasses to escape; and turn the cooler bottom up, letting it stand until sufficiently strained; by which said apparatus a very simple and efficient method of cooling and straining is provided, that can be put in practice readily upon plantations, &c., where the expensive centrifugal apparatus cannot be had.

Figure 1 is a longitudinal sectional elevation of my improved cooling and straining apparatus, with the perforated tubes and straining-cover, as applied after the cooling has been accomplished, ready for turning over to begin the straining process. Fig. 2 is a top view of Fig. 1. Fig. 3 is a plan view of the straining-cover, and Fig. 4 is a cross-section of the apparatus shown in the straining position, the section being taken on the line *xx*, of Fig. 2.

Similar letters of reference indicate corresponding parts.

A represents a large box or case of wood or any other suitable material, with trunnions B, supported in stands C, so that it may be revolved on said trunnions. D represents legs or braces, one of which is pivoted to each side of the case so as to be used for holding it level either side up, the said legs being pivoted to the case in the horizontal plane of the axis

on which the box turns, and capable of turning around on their pivots. E represents the perforated hollow tubes with conical ends F not perforated. G is a lattice-work straining-cover of narrow strips of metal placed side by side with slight spaces between, secured by cross-bars not placed so close together. H represents a strong perforated plank; and I, J, and K, devices for securing these two strainers on the box, all as clearly shown. The plank H is used mainly to re-enforce the thin lattice strainer which is not capable of holding the sugar when the apparatus is adjusted for draining. The cross-bars of the strainer G hold the main portion of it above the surface of H, and furnish channels for the molasses dripping on to the upper surface of the lattice to flow to the holes in it through which the molasses drips into a receptacle below. After the hot sugar has cooled in the open case A, the tubes are put in, and together with the sugar confined against falling out by the straining covers, which are then put on, and the apparatus is turned bottom side up.

This simple and cheap apparatus may be made and put in operation on a plantation with the facilities commonly found there, and may be managed by plantation hands, and is a valuable substitute for the more expensive apparatus, while it is far better than the common plantation mode of draining in hogsheads, by which the work cannot be done effectually, so that much of the molasses remains, making the sugar wet and dark colored.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

The combination, with the revolving cooling-case A, of the perforated tubes, a detachable straining-cover, and devices for fastening the cover to the cooler, all substantially as specified.

BRANCH TANNER.

Witnesses:

OSCAR CHENEY,
THOS. B. HELM.