

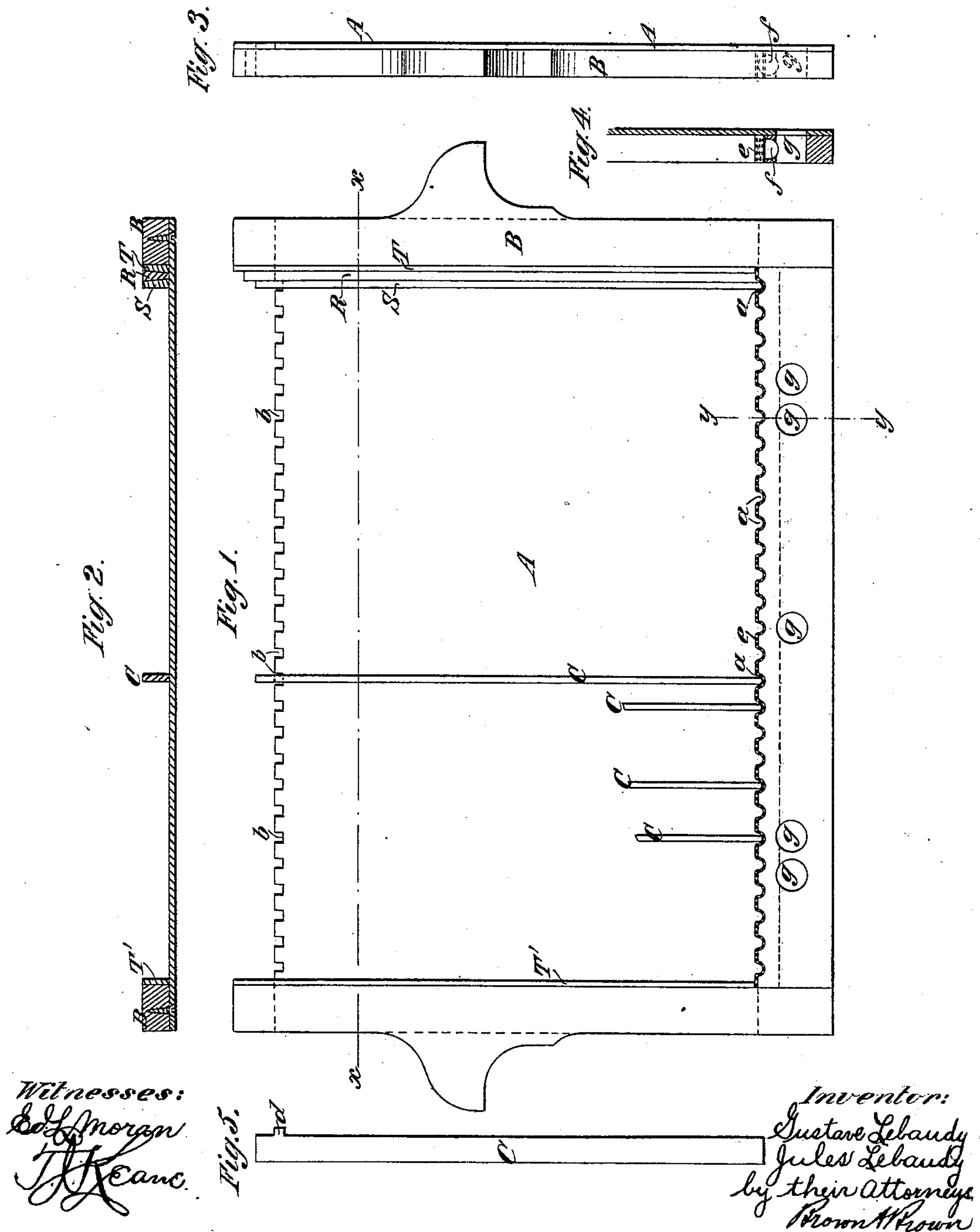
(No Model.)

G. & J. LEBAUDY.

APPARATUS FOR THE MANUFACTURE OF SUGAR IN INGOTS.

No. 270,818.

Patented Jan. 16, 1883.



Witnesses:
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UNITED STATES PATENT OFFICE.

GUSTAVE LEBAUDY AND JULES LEBAUDY, OF PARIS, FRANCE.

APPARATUS FOR THE MANUFACTURE OF SUGAR IN INGOTS.

SPECIFICATION forming part of Letters Patent No. 270,818, dated January 16, 1883.

Application filed November 6, 1882. (No model.) Patented in France May 17, 1882, No. 146,329.

To all whom it may concern:

Be it known that we, GUSTAVE LEBAUDY and JULES LEBAUDY, of Paris, in the Republic of France, have invented a new and useful
5 Improvement in Apparatus for the Manufacture of Sugar in Ingots, (which has been patented in France by brevet d'addition to brevet d'invention No. 146,389, dated May 17, 1882,) of which the following is a specification, reference being had to the accompanying drawings.

10 This invention consists in an improvement upon that class of apparatus for the manufacture of sugar in ingots which has been described in our United States Patent No.
15 259,874, dated June 20, 1882.

One part of the invention relates to a novel construction of the molding-plates, and is based principally upon the employment of movable
20 partition-strips, which are independent of the plates proper which form the bases of the molding-plates. These strips may be fixed in the frames of the molding-plates which contain them at variable distances from each other, according to the thickness which it is
25 desired to give to the ingots.

Another part of the invention relates to a provision for removing the ingots from the molds, based principally upon the employment at the extremities of each of the frames of the
30 apparatus of a particular system or arrangement of border-strips, combined with counter-strips of trapezoidal transverse section, permitting the loosening of the mass of sugar and the easy removal of the strips and of the ingots of sugar which have been molded in the
35 apparatus.

Another part of the invention consists in providing for the evacuation of the sirups proceeding from the drainage of the ingots
40 by means of openings made transversely in the frames of the molding-plates, below the perforated or reticulated metal which occupies the lower part, the juxtaposition of such openings, while the molding-plates are assembled
45 together, constituting drainage-passages, terminating in the two opposite faces of the apparatus and capable of being put in communication with vacuum apparatus.

In the accompanying drawings, Figure 1 is
50 a front view of one of the molding-plates. Fig.

2 is a horizontal section of the same in the line *x x* of Fig. 1. Fig 3 is a side edge view of the same. Fig. 4 is a vertical section in the line *y y* of Fig. 1. Fig. 5 is a side view of one of the independent removable partition-strips. 55

The molding-plates proper are represented as composed of a frame of wood or metal, B, and a plate proper, A, of metal, which is secured to the faces of said frame by screws or otherwise. The frame B and plate A may, however, be of one piece. The independent removable partition-strips C, made separate from the plates A, are of a width equal to the thickness of the frames B, and equal to the space between two of the plates A, when the
60 molding-plates are assembled together for use, and those of each molding-plate are retained in place by having their lower edges inserted into notches *a a*, made in the lower part of the frame B, and by having provided on one of
65 their edges teeth or projections *d*, one on each, (see Fig. 5,) which enter notches in the upper edge of the plate A. The perforated or reticulated metal *e*, (see Fig. 4,) with which the lower horizontal part of each frame B is furnished, follows the undulations of the notches
70 *a a*. The number of the notches *a* and corresponding notches, *b*, are such that the space between two consecutive partition-strips C will furnish the smallest ingot desired to be
75 produced, and the successive omission of the strips C permits us to obtain multiples of this ingot. It may be understood that we can thus, by the simple variation of the spacing of the partition-strips, obtain in the same apparatus
80 ingots of different dimensions, according to the wants of consumers. 85

When, in the use of an apparatus constructed as above described, a molding-plate, A B, is removed from the apparatus to take out the
90 sugar the ingots of sugar and the removable partition-strips C C are held between the two vertical sides of the frame B; and in order to take out the sugar one of the ingots or one of the removable partition-strips must first be
95 taken out. This frequently occasions the breaking of one of the ingots. We prevent that inconvenience by placing between one of the vertical sides of the frame B and neighboring ingot-space two movable strips, R and S, 100

of trapezoidal transverse section, as shown in Fig. 2. The strip R, being inclined on two faces, acts as a wedge. If the frame B is of wood, (as it is supposed to be in the case represented in the drawings,) it is lined internally on its vertical sides by fixed strips T T' of metal, as shown in Fig. 2. The one, T', is in contact with the sugar, and is rectangular. The other, T, has a trapezoidal transverse section, and is in contact with the strips R.

The removal of the sugar is to be commenced by taking out the strip R, which is not in contact with the sugar, and slides out easily from between the strip S and the frame B T', leaving a space which permits the loosening of the sugar by a slight lateral displacement of the ingots and partition-strips upon the plate A to detach them from one another; and this loosening permits the ingots and strips to be taken out successively without any breakage of the ingots. The partition-strips are thus permitted to be made rectangular.

The channel which serves for the drainage of the sirup consists of a trench hollowed out in the upper face of the horizontal lower part of the frame B, and covered with the perforated or reticulated metal e. This trench debouches into the exterior faces of the frame B by means of passages g g, made transversely through the said frame, and the apertures of which are so arranged in the frames that the passages g g of several assembled frames combine to form

through the entire system channels which serve for the running off of the sirup drained from the molded sugar to a suitable receptacle, or which may be connected with a vacuum drainage apparatus.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination of the frames B, having notches a, the plates A, having notches b, and the independent removable partition-strips C, furnished with projections d, substantially as herein described.

2. The combination, with a molding-plate, A B, and removable partition-strips C, of the removable border-strips S and counter-strips R, of trapezoidal or wedge-like transverse section, substantially as and for the purpose herein specified.

3. A sugar-molding plate composed of a frame, B, and a plate proper, A, and having in the upper face of the lower horizontal part of its frame B a trench, f, and having in said horizontal part, below the said trench, transverse passages g g, substantially as herein described.

This specification signed this 14th day of October, 1882.

GUSTAVE LEBAUDY.
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Witnesses:

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