

No. 654,994.

Patented July 31, 1900.

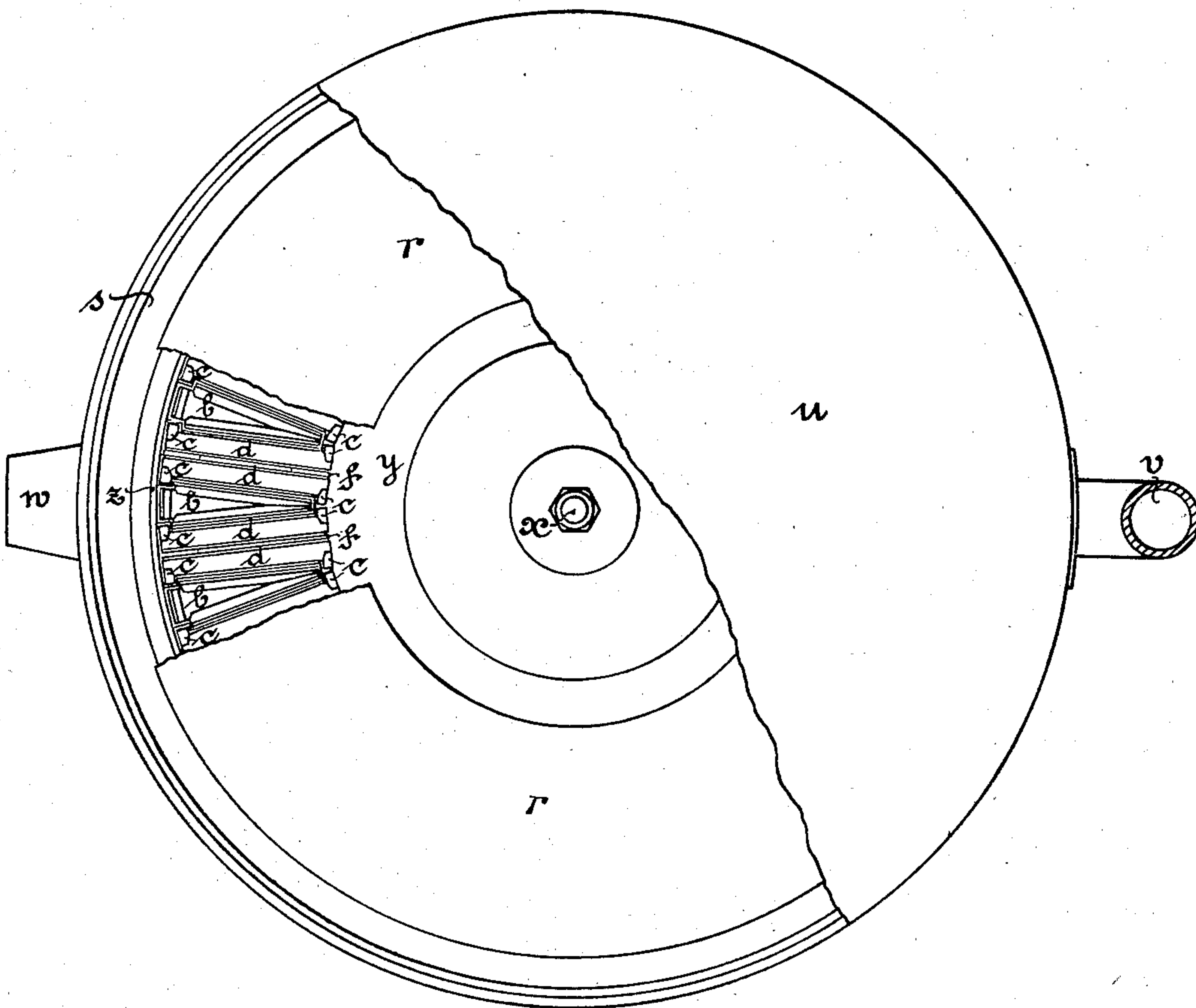
L. MAY.
CENTRIFUGAL MACHINE.

(Application filed Mar. 27, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.



Witnesses:-
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George Barry Jr.

Inventor:-
Leopold May
by Attorney
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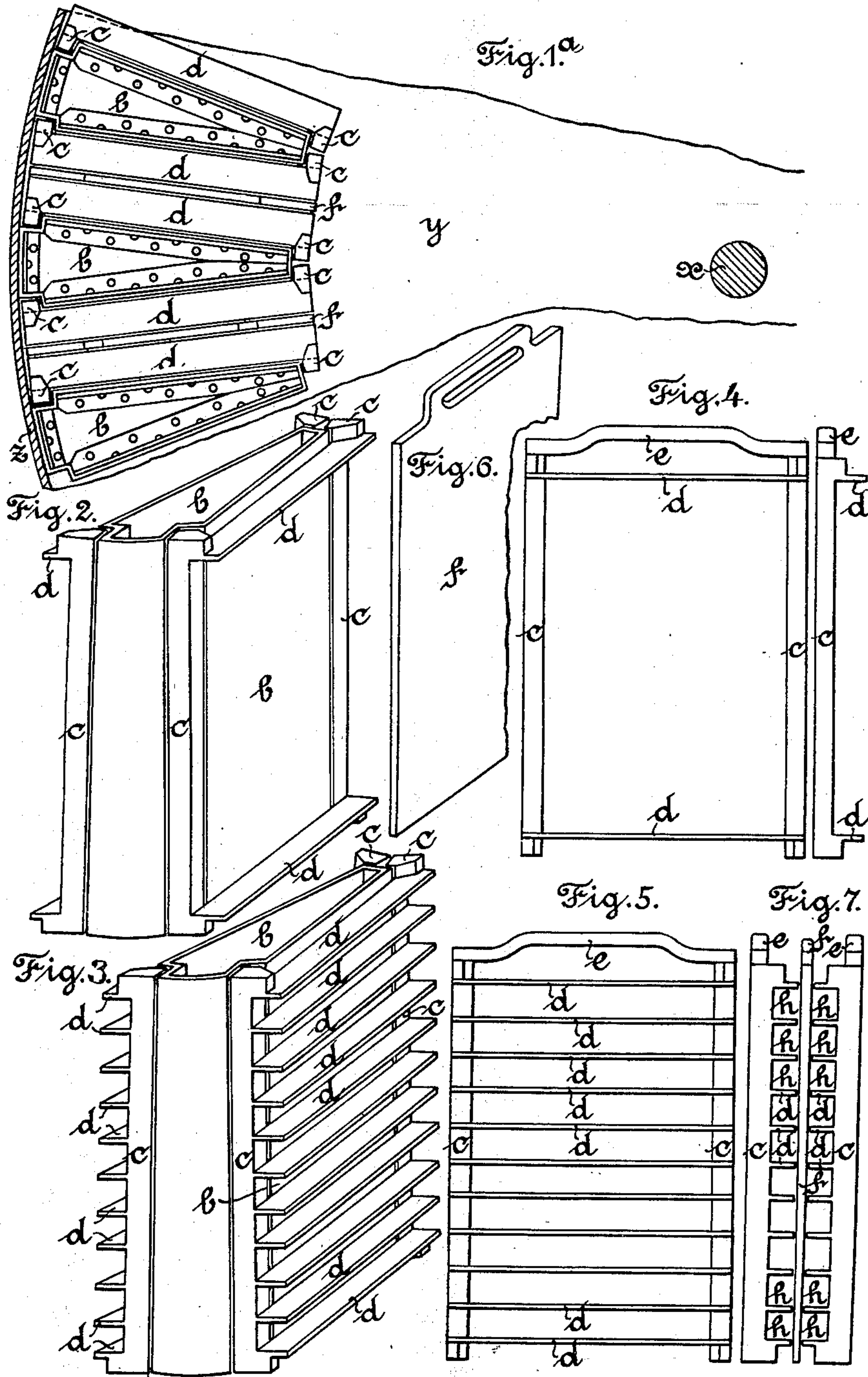
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Witnesses:-
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Inventor:-
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UNITED STATES PATENT OFFICE.

LEOPOLD MAY, OF UNGARISCH-OSTRA, AUSTRIA-HUNGARY.

CENTRIFUGAL MACHINE.

SPECIFICATION forming part of Letters Patent No. 654,994, dated July 31, 1900.

Application filed March 27, 1900. Serial No. 10,345. (No model.)

To all whom it may concern:

Be it known that I, LEOPOLD MAY, a subject of the Emperor of Austria-Hungary, and a resident of Ungarisch-Ostra, Moravia, Austria-Hungary, have invented new and useful Improvements in or Relating to Centrifugal Machines, of which the following is a specification.

This invention relates to apparatus by means of which plates, rods, or strips are produced from moist crystallized sugar material—such, for example, as what is known in the sugar industry as “masse-cuite.” Apparatus according thereto comprises a centrifugal drum provided with wedge-shaped filling-pieces between which are inserted removable sliding frames which comprise supporting-bars connected by a handle and two or more cross-slats located one over another in such a manner that the cross-slats of adjacent frames are opposite to one another; but a space is left between them, in which is placed a removable partition. By this means chambers are formed in the centrifugal drum between the lateral surfaces of adjacent fixed filling-pieces, the removable sliding frames, and the removable partitions, in which the masse-cuite is formed into plates, rods, or strips when the centrifugal drum is rotated, and the said plates, rods, or strips are then taken out of the centrifugal drum by means of the frames supporting them and may be removed from the frames by any suitable means.

Figure 1 in the accompanying drawings is a plan view of a centrifugal drum and its stationary casing embodying my invention, the covers of the casing and drum being partly broken away to show the filling-pieces, frames, and partitions which constitute the principal features of the invention; Fig. 1^a, a horizontal section of a part of the centrifugal drum and a plan of the said filling-pieces, frames, and partitions; Figs. 2 and 3, perspective views of one of said filling-pieces and two different examples of said frames; Figs. 4 and 5, face views of frames corresponding, respectively, with Figs. 2 and 3; Fig. 6, a perspective view of one of the partitions, and Fig. 7 an edge view of two of said frames and their intermediate partition.

Similar letters of reference designate corresponding parts in all the figures.

x designates the spindle of the drum; *y*, the bottom of the drum; *z*, the perforated wall of the drum; *s*, the stationary casing of the drum; *r*, the cover of the drum, and *u* the cover of the casing. The casing *s* is represented in Fig. 1 as provided with the usual steam-escape pipe *v* and with a conduit-pipe *w* for the expelled syrup.

In the interior of the drum there are secured any number of wedge-shaped filling-pieces *b* at such a distance apart that between every two of the same there is room for two of the frames *c d*, each of which comprises lateral supporting-bars *c*, connected by a handle *e*, and two or more cross-slats *d*, arranged one above another. The cross-slats of the adjacent frames are exactly opposite to each other, but are not in contact with each other. On the contrary, there is a sufficient space left between them to enable one of the partitions *f*, Fig. 6, provided with a handle, to be inserted into this space, as will be seen from Figs. 1, 1^a, and 7.

Figs. 4 and 5 show the frames *c d*, according to Figs. 2 and 3, removed from the filling-pieces *b*, and from these figures the arrangement of the handles *e*, which are omitted in Figs. 1, 2, and 4 for the sake of clearness, will be clearly seen.

In Figs. 2 and 4 the frames are shown with only two cross-slats *d* near the top and bottom, respectively, and in Figs. 3 and 5 they are shown with several such slats.

Fig. 7 shows in end elevation the position occupied by two adjacent frames in the centrifugal drum with the partition *f* between them in order to form in the drum, in combination with the filling-pieces *b*, chambers *h*, in which the masse-cuite introduced into the drum receives the desired shape.

The mode of operation of the apparatus is as follows: After the required number of frames *c d* have been inserted into the drum in order to fill it and a partition *f* has been inserted into the space between every two adjacent frames the centrifugal drum is set in motion, and the masse-cuite is poured into it. The masse-cuite then fills all the chambers formed by the lateral surfaces of the

filling-pieces *b*, the frames *c d*, and the partitions *f* in the drum, and in gradually solidifying takes the shape of these chambers. Thereupon the shaped sugar is clayed in the
5 desired manner by steam, water, or other material suitable therefor, and the rotation of the drum is stopped. The partitions *f* are then loosened and withdrawn, and each frame containing the shaped and clayed sugar is
10 removed from the filling-pieces *b*.

What I claim as my invention is—

The combination with a centrifugal drum, of wedge-shaped filling-pieces *b*, removable

frames *c d* interposed between said filling-pieces, and removable partitions *f* between
15 said frames forming chambers *h h*, substantially as and for the purpose herein described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of witnesses, this 13th day of March, 1900. 20

LEOPOLD MAY.

Witnesses:

GEORG CUMSEY,

A. G. DEUAX,

ALVESTO S. HOGUE.