G. DINKEL.

Centrifugal Machine.

No. 165,077. Patented June 29, 1875.

*Fig. 1.*

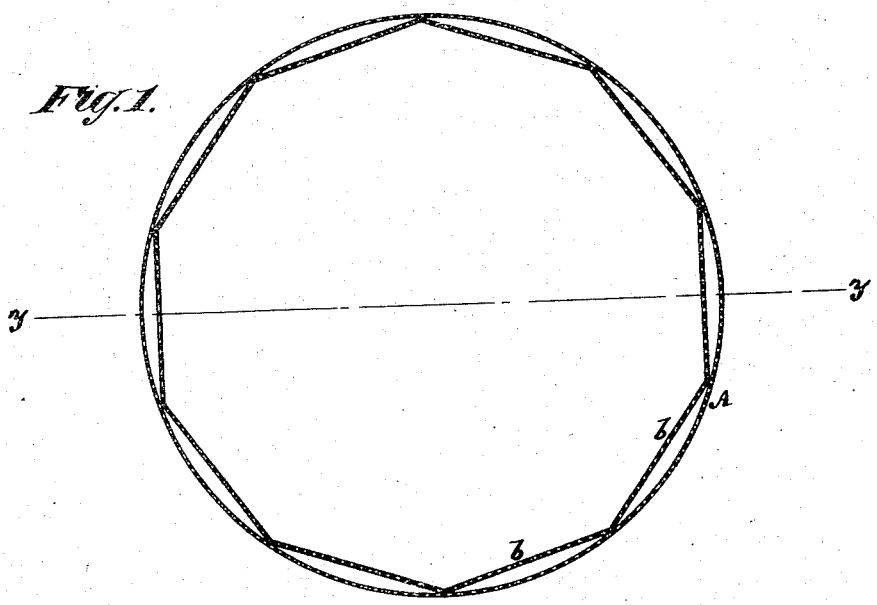
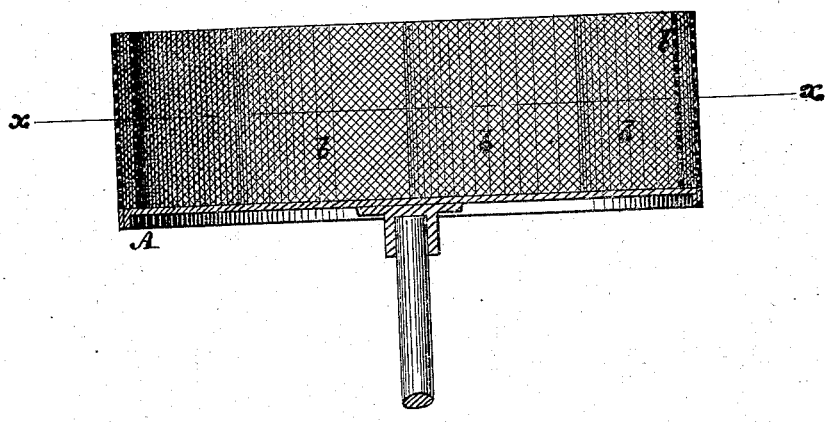



*Fig. 2.*




Witnesses
John Becker
Fred Haynes

George Dinkel
by his Attorneys
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THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

# UNITED STATES PATENT OFFICE.

GEORGE DINKEL, OF JERSEY CITY, N. J., ASSIGNOR TO F. O. MATTHIESSEN AND WIECHERS SUGAR-REFINING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN CENTRIFUGAL MACHINES.

Specification forming part of Letters Patent No. **165,077**, dated June 29, 1875; application filed May 17, 1875.

*To all whom it may concern:*

Be it known that I, GEORGE DINKEL, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Centrifugal Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

This invention relates to the revolving drum or basket of centrifugal machines for expelling moisture from various substances, including the draining or purging and drying of sugar, especially sugar in molds for the manufacture of hard sugar, to which the description of the invention will here, by way of illustration, be restricted.

The invention has for its object the more perfect and uniform draining of the mass under treatment, besides, by the flat configuration given to its outer surface, reducing the amount of scrap when cutting up the mass into slabs to be afterward divided into cubes. To these ends the invention consists in a polygonal construction of the perforated revolving drum on the interior of its sides.

In the accompanying drawing, Figure 1 represents a horizontal section, on the line *x x*, of a centrifugal drum or basket constructed in accordance with my invention; and Fig. 2, a vertical section of the same on the line *y y*.

In carrying out the invention, various modes of construction may be adopted to give to the revolving drum its polygonal shape or character on its inner side, instead of the circular or approximately circular form it has heretofore had. Thus the drum A itself may be made of polygonal shape as regards its perforated wall or shell, or it may be made as shown in the drawing, with its perforated wall of the usual circular form, and perforated plates or pieces *b*, constituting a perforated lining, be arranged around within it, to give to the inner side of the drum its required polygonal shape. This latter is a desirable mode of construction, inasmuch as the polygonal perforated inner wall is braced by the outer perforated wall without impairing the efficiency of the polygonal surfaces, and such mode of construction admits of the ready application of the invention to centrifugal machines now in use without removing the drum.

By thus forming the inner side of the drum of polygonal shape, without reference to the number of sides in the polygon, and such inner side being of the necessary perforated or reticulated construction for escape through it of the liquid or moisture of which the sugar or mass under treatment is required to be relieved, numerous advantages are obtained. Thus, when draining or purging sugar in molds arranged around within the drum, to free the sugar of green sirup or other adhering fluid or moisture, not only is a perfect and uniform draining of the mass effected, but when afterward cutting up said mass, as in the manufacture of hard sugar into slabs which are subsequently divided into cubes, the flat outer sides of the molded mass enable the latter to be cut up much more economically—that is, with less scrap—than when the sugar has been purged in molds constructed to fit the circular wall of the drum, and which leave the sugar with a curved instead of a flat outer surface.

I claim—

A revolving drum or basket for centrifugal machines, constructed with perforated walls of a continuous polygonal shape, substantially as described, whereby a perfect and uniform draining of the mass is effected, and enabling the flat outer sides of the molded mass to be cut more economically, as set forth.

GEORGE DINKEL.

Witnesses:

ISAAC ROMAINE,

P. J. MURPHY.