

# UNITED STATES PATENT OFFICE.

CARL KRONIG, OF VIENNA, AUSTRIA.

## IMPROVEMENT IN SUGAR-MOLDS.

Specification forming part of Letters Patent No. 43,376, dated June 28, 1864.

*To all whom it may concern:*

Be it known that I, CARL KRONIG, of Vienna, Austria, have invented a certain new and useful Improvement in the Construction of Sugar-Molds; and I do hereby declare that the following is a full, clear, and exact description thereof.

Hitherto the molds used in the refining of sugar have been made of various material, the object sought being to obtain those which shall be not merely durable, but shall also impart no injurious color or quality to the sugar. The best as to quality are those made of glass; but these are found too costly by reason of their being so readily broken, either in handling or by the alternations of temperature to which they are periodically subjected; and this is true also of those made of pottery. Iron coated on the interior with some kinds of varnish or enameled is the most durable material; but the coating cracks after a little time and permits the oxide of iron to work through, thereby discoloring the sugar. Whenever this occurs the repairs to the enamel are very difficult to make, although these are constantly required. Molds of copper, carefully tinned on the interior surface, are very satisfactory as to quality of the work; but the first cost is a considerable item, and they also frequently need retinning.

My invention consists in making such molds of the material known as "papier-maché," the cement used for causing the successive sheets of paper or pasteboard to adhere being such as will not be destroyed or weakened by the degree of heat to which the mold must be at times exposed. A common strong thin pasteboard answers the purpose very well. This is

to be cut into suitably-shaped pieces to form, when bent, a frustum of a cone of the size and shape required for the body of the mold. The edges of the pasteboard sheets should be cut to a "feather-edge," and when lapped and pasted will form a smooth surface. Several layers of this may be employed to obtain the requisite strength, and thus the body of the mold will be formed. The cap or small end is made in like manner and fastened to the body with a similar cement. The mold is then to be dipped into linseed-oil, and afterward dried at a temperature of about 135° Fahrenheit. A ring or hoop of iron may be put around the large open end and secured with rivets, and another at the tip or smaller orifice. The mold is then to be coated on the inside with a paste of red lead and oil, which shall fill up all irregularities there may be, and, when dry, is to be placed in a lathe and the interior carefully ground out smooth. It is then to be varnished with any of the varnishes which will withstand the heat of the melted sugar, and when that is properly dried the mold is ready for use.

Successive layers of thin paper formed upon a properly-shaped mold and cemented together with any of the cements which will withstand the heat and finished as above described form a very good substitute for the pasteboard.

I claim—

The new article of manufacture herein described, being a sugar-mold formed of papier-maché, in the manner substantially as set forth.

CARL KRONIG.

Witnesses:

ALEXANDER ULBRICHT,  
LOUIS SAUER.