

W. F. WALKER.
MACHINE FOR SCOURING AND CLEANING CANDIES.
APPLICATION FILED JAN. 18, 1909.

958,338.

Patented May 17, 1910.

Fig. 1.

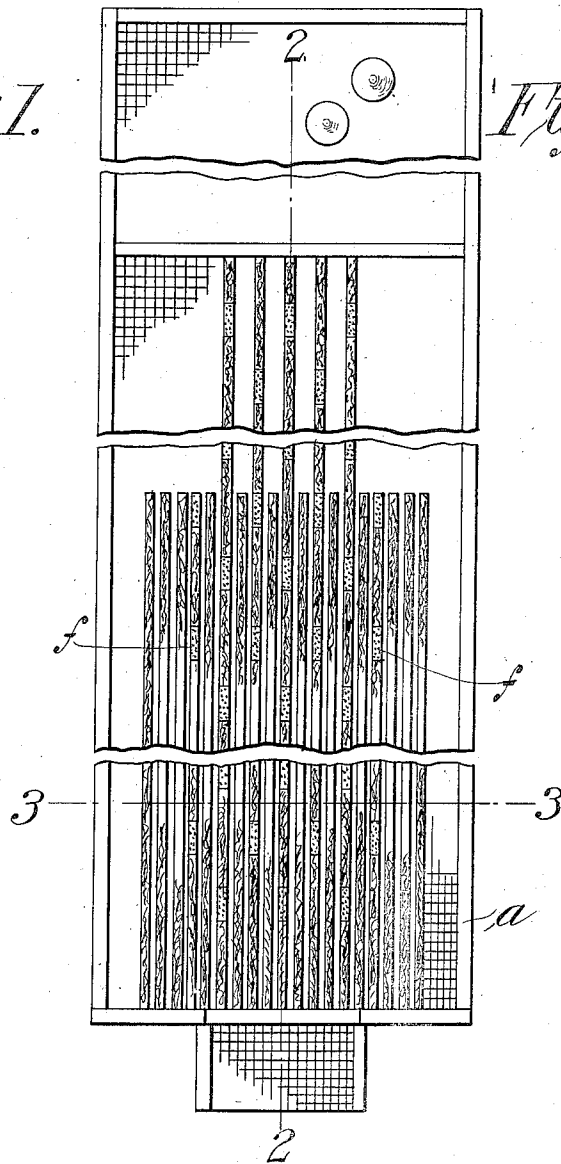


Fig. 2.

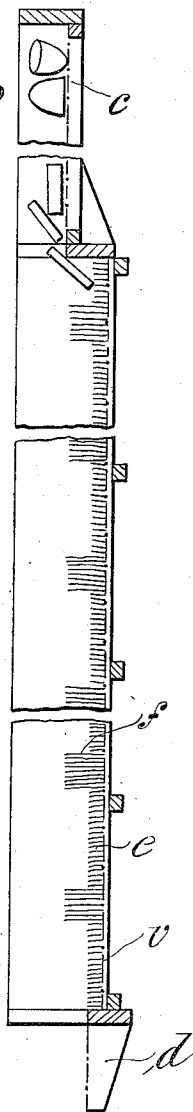
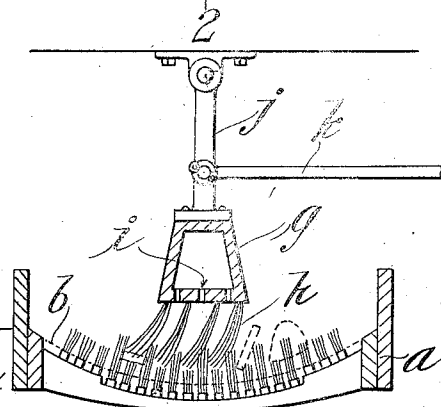


Fig. 3.



WITNESSES:

H. L. Sprague
Harry W. Brown

INVENTOR.

Walter F. Walker.

BY *Chapin & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WALTER F. WALKER, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO THE CONFECTIONERS' MACHINERY & MANUFACTURING COMPANY, OF SPRINGFIELD, MASSACHUSETTS, A CORPORATION.

MACHINE FOR SCOURING AND CLEANING CANDIES.

958,338.

Specification of Letters Patent. Patented May 17, 1910.

Application filed January 18, 1909. Serial No. 472,819.

To all whom it may concern:

Be it known that I, WALTER F. WALKER, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Machines for Scouring and Cleaning Candies, of which the following is a specification.

This invention relates to machines for cleaning candies, confections, and other materials, and is especially designed for cleaning pieces of candy that are rectangular or cubical in shape as for example what is known in the trade as "chocolate chips."

One of the objects of the invention is to overcome the defects inherent in cleaning and scouring machines that are provided with an internal arrangement of brushes and sieves of the type shown and described in Letters Patent of the United States issued to Gabriel Carlson on October 16, 1894, and numbered 527,662, wherein is described a machine for cleaning candies that are molded in starch or other finely divided dry material.

This invention broadly consists in providing a brush-lined sieve, some of the bristles of which are formed with long tufts or bunches and are arranged in staggered relation to each other, whereby when a constantly oscillating or vibrating brush is made to sweep over the brush-lined sieve, the articles to be cleaned will be subjected to a thorough cleaning and brushing operation on all the surfaces of the same, particularly the edges of the substances to be cleaned when pieces of the material are to be cleaned as "chocolate chips."

In the drawings forming part of this application, Figure 1 is a plan view showing, in general, the arrangement of the brush-lined sieve and the staggered relation of the longer tufts or bunches of the bristles. Fig. 2 is a longitudinal, vertical section of Fig. 1 on the line 2—2, showing in side elevation the tufts or bunches of the brushes that have different lengths of bristles which extend upward through the meshes of the sieve. Fig. 3 is a transverse section on the line 3—3, Fig. 1, showing the rocking or vibrating brush that is located over the brush-lined sieve, and also showing the curved or arch-shaped formation of the sieve

with the bristles extending upward through the meshes thereof and the tufts or bunches of longer bristles.

Referring to the drawings in detail, *a* designates the brush-frame proper that is provided with a sieve *b* in the bottom portion thereof. This sieve is made arch-shaped or curved, as shown in Fig. 3, so that the candies or confections will gravitate or roll, and is adapted to have longitudinal vibratory motion imparted thereto by any suitable means (not shown) as for example, the means employed in the Carlson patent above referred to.

The brush-frame *a* is provided with a receiving sieve or shelf portion *c* and a delivery shelf *d*. The shelves *c* and *d* are formed with a sieve bottom so as to allow any of the loose material to freely fall from the confections to the lowest or center portion during the cleaning operation.

The confections or candies to be cleaned travel, during the cleaning operation, from the shelf *c* to the shelf *d* across the intervening brush-lined sieve at *b*.

e designates the shorter and larger portion of the bristles of the brush that extend upward through the sieve *b*, and *f* designates the tufts or bunches of the longer portion of the brush which extend through the sieve and are arranged in staggered relation to each other, as shown in plan view in Fig. 1, so that as the vibrating brush, which is shown at *g*, and the bristles carried thereby, as shown at *h*, sweep over the confections, the longer bunches or tufts of bristles *f* will engage the candies or other substances, that are being cleaned so that they will be tipped or moved against these longer bristles and the sides thereof will be thoroughly cleaned or brushed by said longer bristles during their passage through the machine, thus accomplishing a result that the cleaning machines of this class do not, as far as I am aware, accomplish at the present time.

The vibrating brush *g* is adapted to furnish, by means of the openings *i*, a suitable flow of air under pressure in order to assist in cleaning the confections, by blowing therefrom the starch or other fine, dry material in which the candies are molded in the usual way. The brush *g* is adapted to be vibrated by means of the lever and link connections *j* and *k*, from any suitable operative

part of the machine. The purpose, therefore, of arranging the tufts or bunches of the brush filaments or bristles in a staggered relation to each other is, that during the passage of the confections through the machine all of the surfaces of each confection may be thoroughly brushed and cleaned by the joint action of the brush *g* and the longer tufts or bunches of the main brush *e*, as will be apparent to one skilled in the art.

What I claim, is:—

In a machine for cleaning confections which are substantially flat and thin, the combination of a brush-frame, a receiving platform *c*, and a delivery shelf *d*; the brush-frame being concavo-convex in cross section

and provided with tufts of bristles of different lengths, a sieve or reticulated member through which the tufts of bristles project, the major portion of the tufts being shorter than the minor portion of the tufts, a vibratory brush arranged to be moved transversely over the brush-frame, and in engagement with the tufts of bristles thereof, whereby the confections will be tipped and operated upon by the vibratory motions of the brush and cleaned on all of their surfaces, as described.

WALTER F. WALKER.

Witnesses:

K. I. CLEMONS,
HARRY W. BOWEN.