W. C. SMEND & P. JENKINS.

DEVICE FOR PACKING CUBE SUGAR.

APPLICATION FILED DEC. 30, 1915.

1,261,065. Patented Apr. 2, 1918.

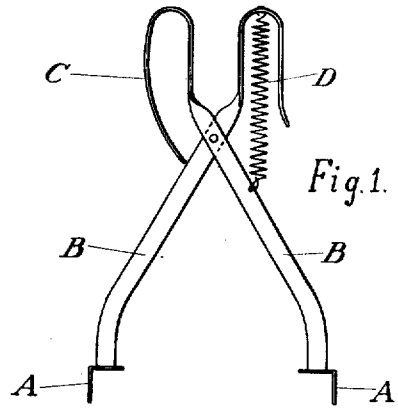


Fig. 1.

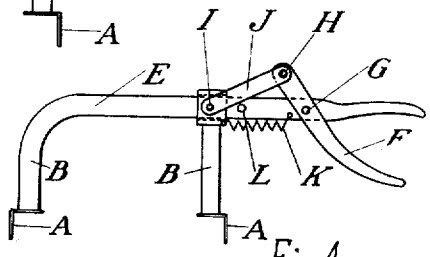


Fig. 4.

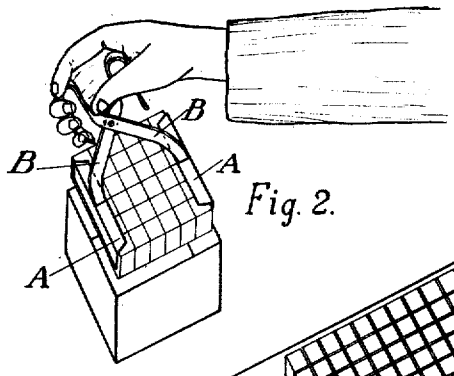


Fig. 2.

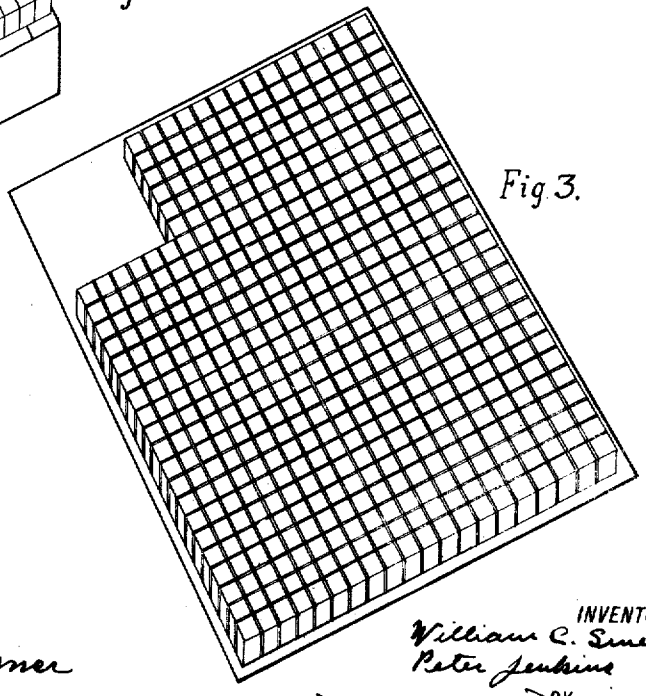


Fig. 3.

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WILLIAM C. SMEND, OF JERSEY CITY, NEW JERSEY, AND PETER JENKINS, OF YONKERS, NEW YORK, ASSIGNORS TO FEDERAL SUGAR REFINING COMPANY, OF YONKERS, NEW YORK, A CORPORATION OF NEW YORK.

DEVICE FOR PACKING CUBE-SUGAR.

1,261,065. Specification of Letters Patent. Patented Apr. 2, 1918.

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To all whom it may concern:

Be it known that we, WILLIAM C. SMEND, a citizen of the German Empire and a subject of the King of Prussia, and a resident of Jersey City, State of New Jersey, and PETER JENKINS, a citizen of the United States, and a resident of Yonkers, State of New York, have invented a certain new and useful Device for Packing Cube-Sugar, of which the following is a specification.

As the final step in the manufacture of pressed cube sugar, the cubes so-called are deposited in a single layer in such relative position to each other on a slab or plate, that they appear in the form of rows running in directions at right angles to each other like the spaces in a checker board, there being interstices of approximately one-eighth of an inch in width between the rows. It should be explained that the term "cube" as used in the sugar trade describes a lump of sugar that is rectilinear, and is not confined to lumps of sugar that are cubical in the geometrical sense.

Heretofore it has been customary in packing pressed cube sugar into cartons for the retail trade, to pick each cube from the slab upon which it lies, and put it into its proper place in the carton, thus packing the sugar cube by cube. This process has required a considerable expenditure of time and labor, and on that account the bulk of the pressed cube sugar consumed has been shipped to the retail trade in barrels or other large receptacles, into which it had been deposited indiscriminately without regard to order or arrangement.

Our invention relates primarily to a new and useful device for lifting a plurality of cubes from their position on a flat surface, and then transporting the same to a carton and packing the same therein with the result that a layer of lumps of the area of the bottom of the carton can thus be lifted and transported in orderly and compact form to the carton and placed therein without disarrangement.

Our invention consists of the construction herein set forth and specifically claimed herein.

Figure 1 is a side elevation of one form of our improved device.

Fig. 2 is a perspective view of the form of our device shown in Fig. 1, between the jaws of which a layer of cubes of sugar is retained preparatory to placing the same in the carton.

Fig. 3 is a perspective view of a layer of cubes of sugar as they appear when coming from the drying room.

Fig. 4 is a side elevation of another form of our device.

In carrying out our invention two jaws or clamping members, each of which is composed of a plate A and shank B, are provided. The plates are of equal length, and when united in the device as hereinafter set forth, are parallel to and laterally opposed to each other. Their length will vary in the specific device, depending upon the area of the layer of cubes of sugar which it is desired to lift or of the bottom surface of the carton which it is desired to fill. In the preferred form of our device the upper edges of the plates are turned over at right angles throughout their length as shown in the drawings. Such a form enables the operator of the device to retain a layer of cubes of sugar with greater rigidity than in case the edges were not turned over, and also makes it possible to force the device down upon the layer, without contact between the edges of the plates and the slab on which the sugar is placed.

Our preferred form of bringing the plates together is shown in Fig. 1. In that form the shanks of the jaws are crossed and pivoted and form handles in the usual manner of shears, pliers, tongs and similar implements, and the clamping members may open and close in the same manner as of those implements. One of the shanks is bent over on itself in the form of a loop C, so that its end comes in contact with the opposite shank at a predetermined point in the opening of the device, and the device may thus be adjusted to grasp layers of cubes of varying width. The other shank is provided with a spring D connecting it with the shank of the opposing member, which said

spring retains the device in its most open or extended position.

Another means of bringing the plates A together is illustrated in Fig. 4. In the construction therein shown one of the shanks is bent to a right angle in a plane at right angles to the plate A, and forms a track E upon which the other shank may slide back and forth by means of an eye in the usual manner. A lever F is fulcrumed on the track E at G and is connected with the sliding member at I by a link J. The ends of the track and of the lever thus form handles. A spring K is provided, which normally maintains the sliding member at its maximum distance from the other member, this maximum distance being pre-determined by the position of a stop L on the track E.

We are well aware that the device herein described would be useful in grasping and lifting a number of cubes of other material than sugar, and we are not to be understood as confining the uses of our device to use with sugar.

In operating the device the plates A are inserted in the interstices between the rows of cubes, and when the handles are brought together the plates A are forced toward each other thus enabling the operator to seize and retain all the cubes of sugar which lie between the plates.

Having thus described our invention what we claim as new and useful is:

1. A lifting device for packing cube sugar consisting of two clamping members, each of which is composed of a plate which is provided with a shank, said plates being parallel to and laterally opposed to each other and having their upper edges turned toward each other at approximate right angles to said plates, and means whereby an opening and closing motion may be imparted to said plates.

2. A lifting device for packing cube sugar consisting of two clamping members, each of which is composed of a plate which is provided with a shank, said plates being parallel to and laterally opposed to each other and having their upper edges turned toward each other at approximate right angles to said plates, means whereby an opening and closing motion may be imparted to said plates, and a stop for limiting the maximum extent to which said plates may be opened.

WILLIAM C. SMEND.
PETER JENKINS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."