

(No Model.)

2 Sheets—Sheet 1.

F. C. HERSEY & H. D. WINTON.

MACHINE FOR PACKING CUBE SUGAR IN BOXES.

No. 370,057.

Patented Sept. 20, 1887.

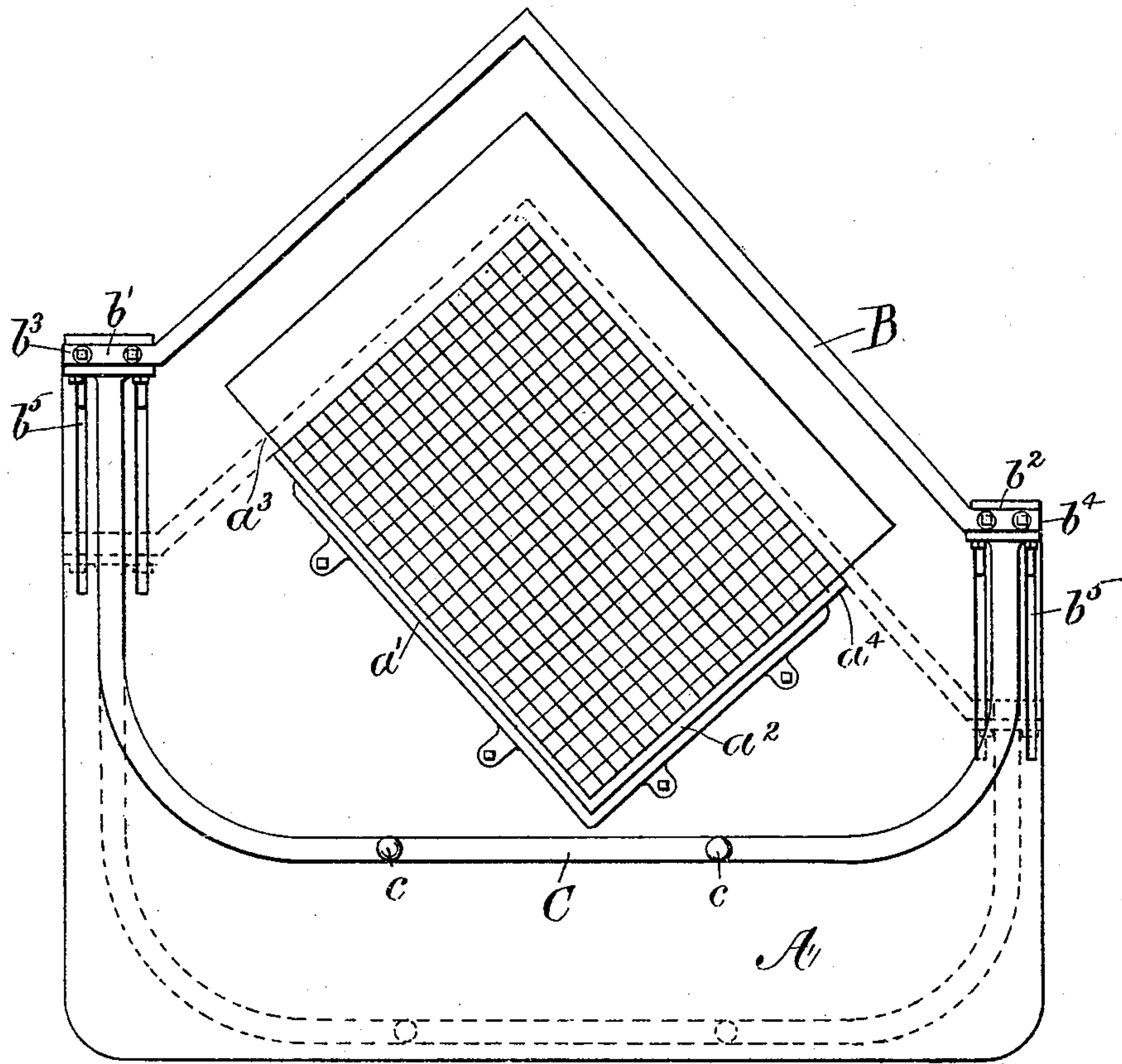


Fig. 1.

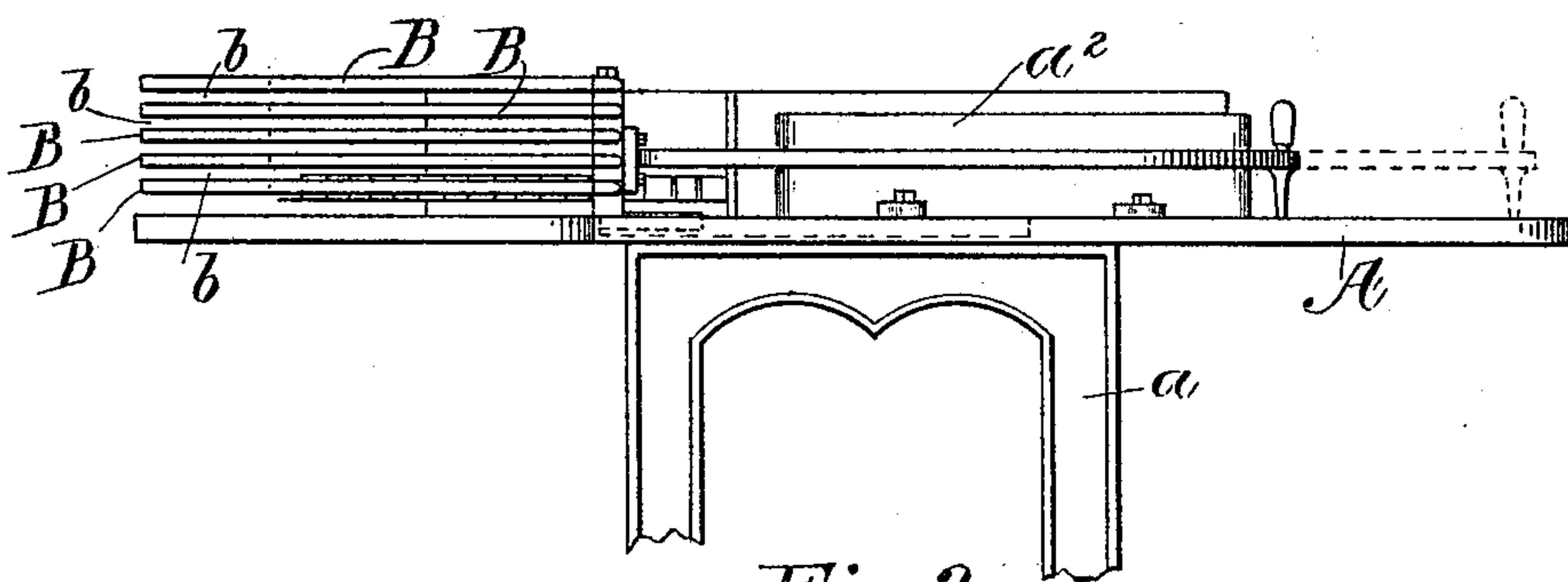


Fig. 2.

Witnesses:

J. W. Dolan.

Fred. B. Dolan.

Inventor:

Francis C. Hersey

Henry D. Winton

by their atty

Charles F. Raymond.

(No Model.)

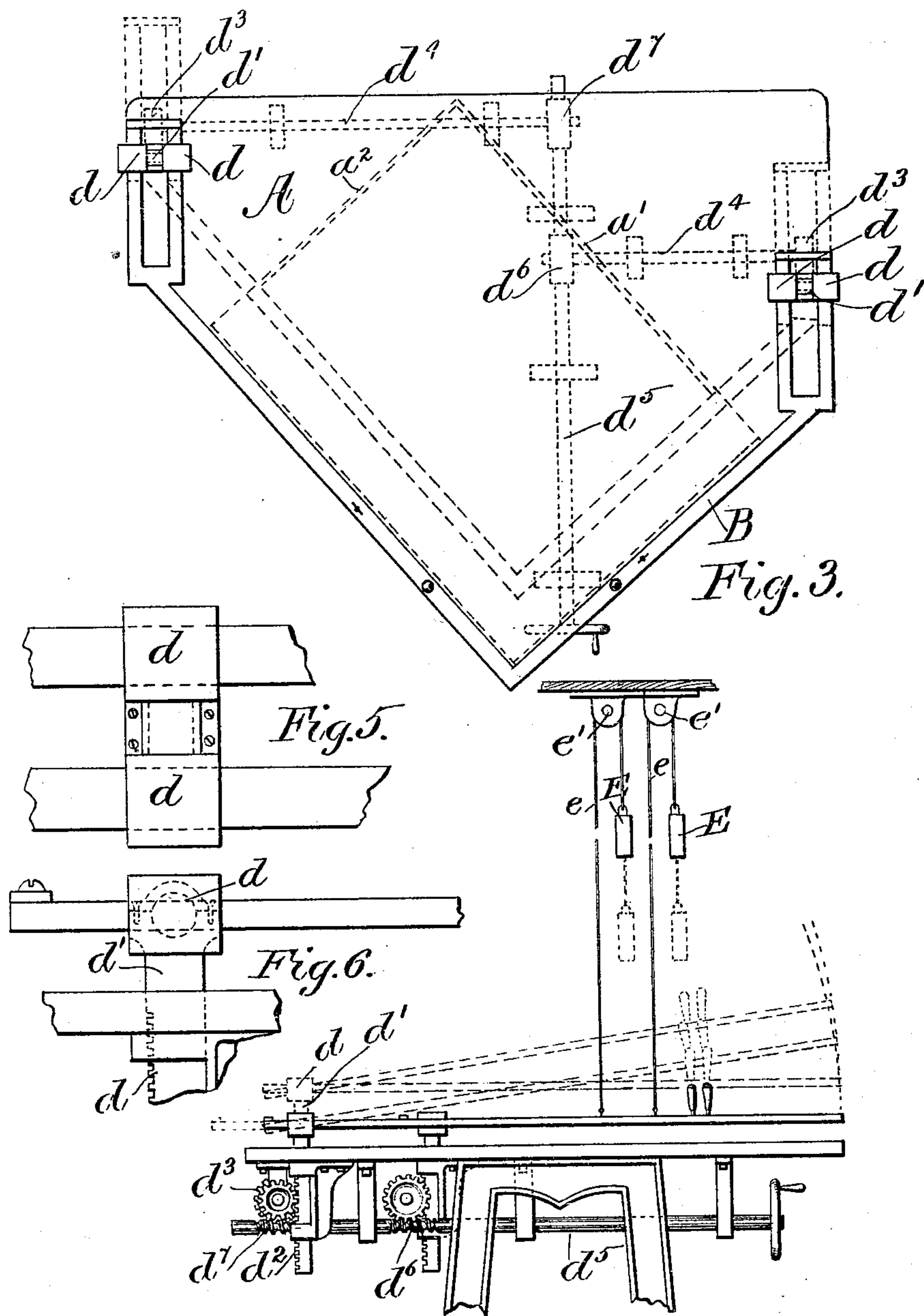
2 Sheets—Sheet 2.

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MACHINE FOR PACKING CUBE SUGAR IN BOXES.

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Witnesses:

J. M. Dolan.

Fred. B. Dolan.

Fig. 4.

Inventor:

Francis C. Hersey.

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Clark & Raymond

UNITED STATES PATENT OFFICE.

FRANCIS C. HERSEY AND HENRY D. WINTON, OF WELLESLEY, ASSIGNORS
TO HERSEY BROTHERS, OF BOSTON, MASSACHUSETTS.

MACHINE FOR PACKING CUBE SUGAR IN BOXES.

SPECIFICATION forming part of Letters Patent No. 370,057, dated September 20, 1887.

Application filed March 26, 1886. Serial No. 196,645. (No model.)

To all whom it may concern:

Be it known that we, FRANCIS C. HERSEY and HENRY D. WINTON, both of Wellesley, in the county of Middlesex and State of Massachusetts, and both citizens of the United States, have invented a new and useful Improvement in Machines for Packing Cube Sugar in Boxes and Cases, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention is an improvement upon that described in our application for Letters Patent of the United States of even date herewith for machines for packing cube sugar in boxes and cases. In said application we have described a box or case-holder provided with a movement in relation to a stationary collector, and the present invention comprises a stationary box or case-holder and a movable collector.

Referring to the drawings, Figure 1 represents a plan view of a machine containing the features of our invention. Fig. 2 is a side elevation thereof. Fig. 3 is a plan view, Fig. 4 an elevation, and Figs. 5 and 6 detail views, illustrating a modification.

A is the table of the machine. It is mounted upon a suitable frame, *a*, and supports the box-holder. This box-holder has the side *a'*, and the end *a''*, and extension pieces or wings, (not shown,) which are similar to those described in our said application (Case A) and are intended for a similar purpose. B are the collector-bars. They are separated by spaces *b*, and are secured at their ends *b'* *b''* to the blocks *b'''* *b''''*, which are movable in the guiding recesses or slots *b'''* in the table of the machine. There is arranged to extend backward from the blocks *b'* *b''* a curved handle-bar C, having the handle *c* *c'*, by which the bars are moved forward and back in relation to the box-holder.

In Figs. 3, 4, 5, and 6 we have shown the use of a single collector-bar instead of a number, and it is secured at each end to its sliding holding-blocks, so as to have a vertical movement in order that it may be lifted from one plate to the next in order. We have

shown this collecting-bar as arranged to slide in the blocks *d*, which are pivoted at the upper ends of the rack-bars *d'*, and the rack-bars are raised and lowered, thereby raising and lowering the collector-bar, by means of the rack *d''* on each bar, the pinions *d'''*, which engage the racks, the shafts *d''''*, and the shaft *d''''''*, connected by a worm and pinion, *d''''''* and *d''''''''*, with the two shafts *d''''*, respectively, and having the operating-handle *d''''''*.

The bar, it will be seen, not only has a horizontal movement in relation to the box-holder, but also a vertical swinging movement upon horizontal pivots. It may be supported in any desired position by means of the counterbalancing-weights E and cords *e*, arranged to pass over pulleys *e'* and connect the weights with the bar. This hinged collector may have two collecting-bars and a plate-receiving recess between them.

In operation the plates holding the cubes of sugar are placed in the section of the box held by the box-holder and the collector moved thereon toward the box-holder to collect or assemble the cubes of sugar into a compact layer, and when one collector-bar is used it will be necessary to lift its level as each additional plate of sugar is placed in the box. This can be done as above described, or by making the box-holder vertically movable.

Having thus fully described our invention, we claim and desire to secure by Letters Patent of the United States—

1. In a machine for packing cubes of sugar or other material, the combination of a stationary device or support for the box or plate, upon which the cubes or blocks are assembled, and a movable cube collecting or assembling device of the character specified, adapted to assemble the cubes or blocks upon said plate or in said box by its movement in relation thereto, substantially as described.

2. The combination of a table having a stationary box-holder or cube-holding plate with the collecting device comprising one or more bars, B, shaped as described, and movable in relation to the box-holder or plate, substantially as set forth.

3. The combination of a stationary box-holder, a collector, substantially as specified,

and means for moving the collector in relation to the stationary box-holder, substantially as described.

4. The combination of the stationary box-
5 holder or cube-holding plate, a cube-collecting
device mounted upon sliding blocks or supports, and guides or recesses in which said
blocks or supports are adapted to be moved,
substantially as described.
- 10 5. The combination of a stationary box-
holding device and a cube-collecting device
comprising a bar hinged at its end to sliding
blocks or supports b' b^2 , substantially as described.
- 15 6. The combination of a support or holder
for a packing-box or a sugar cube or block
holding plate, with a collector-bar, B, hinged
at its ends to vertically-movable supports, and
said vertically-movable supports, as and for
20 the purposes described.
7. The combination, in a machine for pack-

ing cubes or blocks of sugar, of a support for
the box or plate, upon which the cubes or
blocks are carried, a collector-bar hinged at
its ends to vertically-movable supports, said 25
vertically-movable supports, and devices for
holding said supports at any desired elevation,
as and for the purposes described.

8. In a machine for packing cubes or blocks
of sugar, a holder or support for a box or plate 30
carrying the blocks or cubes of sugar, with a
horizontally-movable collector-bar, its supports,
and devices for moving said supports
vertically, whereby the elevation of the collector-bar
is varied or adjusted at the will of 35
the operator, substantially as described.

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Witnesses:

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