No. 685,092. Patented Oct. 22, 1901.

S. R. BELLINGHAM.

RECEPTACLE OR CONTAINER FOR DISCRETE MATERIALS WHEREBY ARBITRARY PORTIONS MAY BE WITHDRAWN.

(Application filed Dec. 6, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 2.

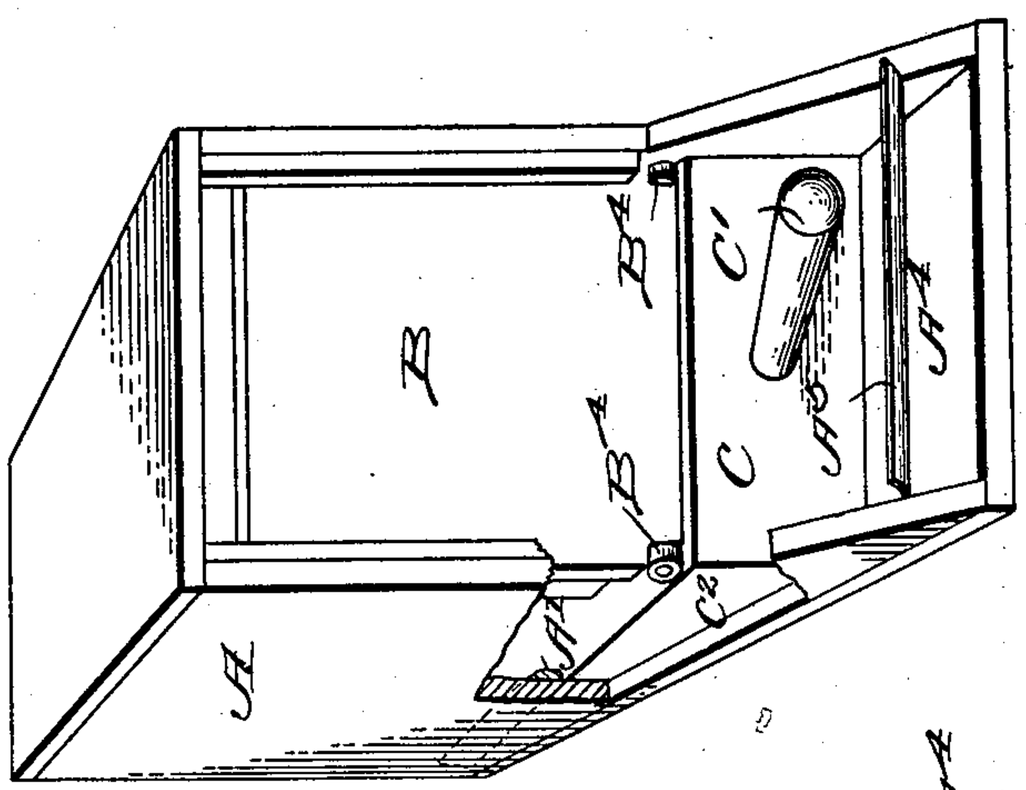

Fig. 1.

Witnesses:
C. D. Kesler.
Dennis Sumby.

Inventor
Sidney R. Bellingham
By James L. Norris.
Atty

No. 685,092. Patented Oct. 22, 1901.

S. R. BELLINGHAM.

RECEPTACLE OR CONTAINER FOR DISCRETE MATERIALS WHEREBY ARBITRARY PORTIONS MAY BE WITHDRAWN.

(Application filed Dec. 6, 1900.)

(No Model.) 2 Sheets—Sheet 2.

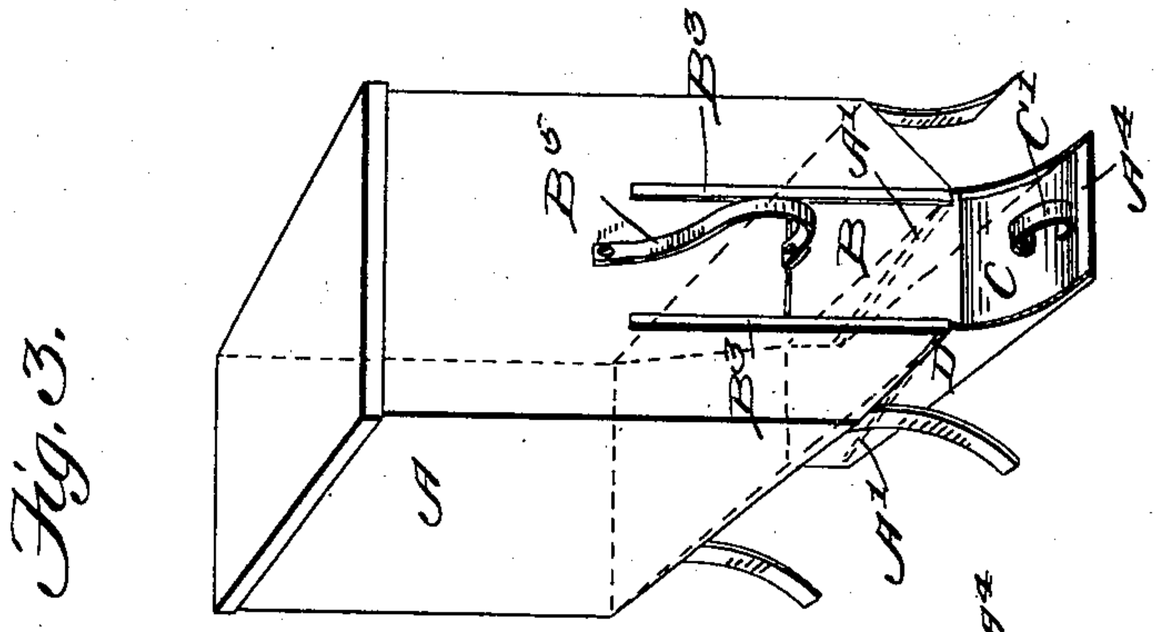

Fig. 3.

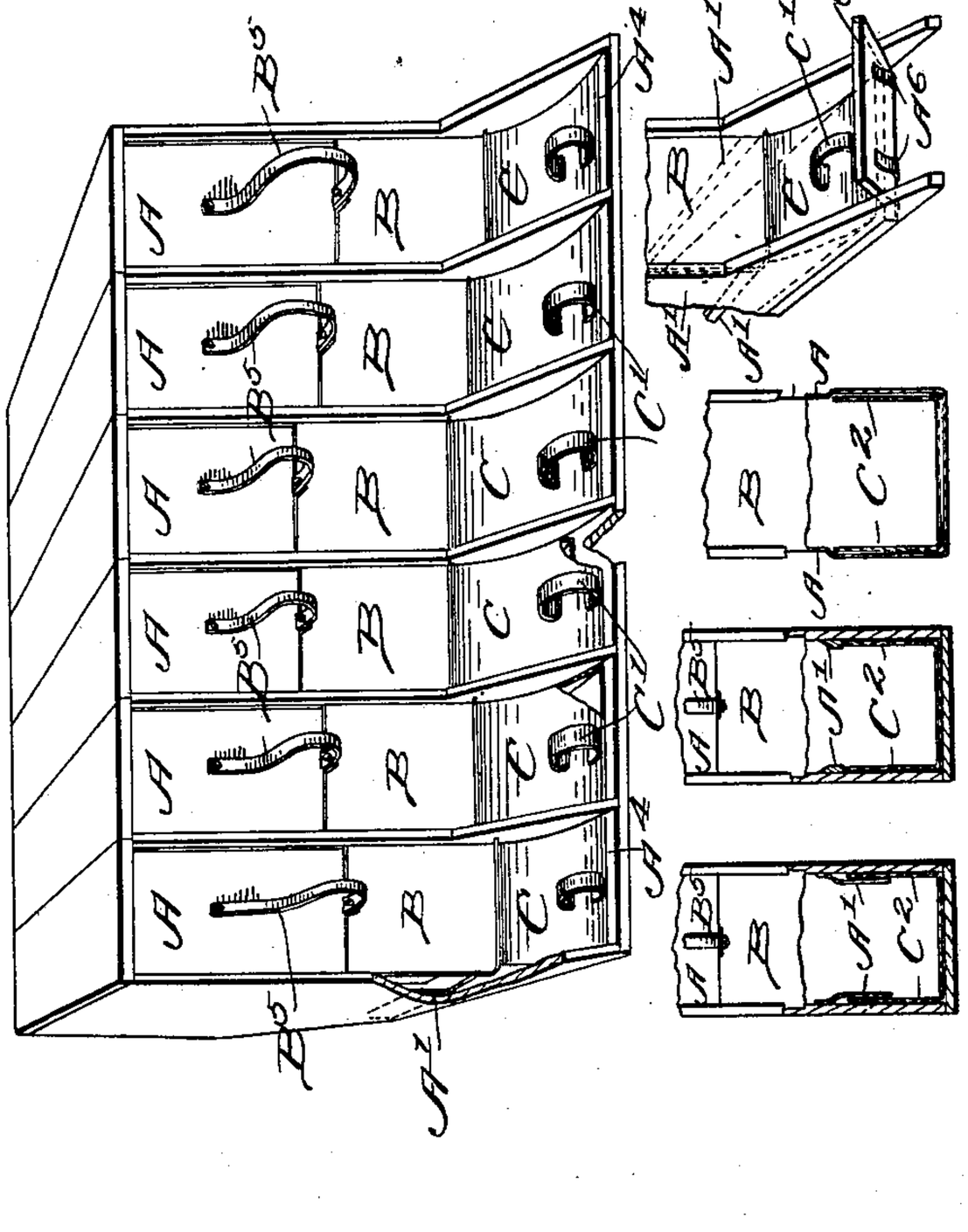

Fig. 4.

Fig. 8.

Fig. 7.

Fig. 6.

Fig. 5.

Witnesses:
C. D. Kesler,
Dennis Sumby.

Inventor
Sidney R. Bellingham
By James L. Norris
Atty.

UNITED STATES PATENT OFFICE.

SIDNEY R. BELLINGHAM, OF GLEN HILL, NEW SOUTH WALES, ASSIGNOR TO HIMSELF, AND DAVID FELL AND NORMAN PHELPS RICHARDS, OF SYDNEY, NEW SOUTH WALES.

RECEPTACLE OR CONTAINER FOR DISCRETE MATERIALS WHEREBY ARBITRARY PORTIONS MAY BE WITHDRAWN.

SPECIFICATION forming part of Letters Patent No. 685,092, dated October 22, 1901.

Application filed December 6, 1900. Serial No. 38,955. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY READ BELLINGHAM, artist, a subject of the Queen of Great Britain, residing at Glen Hill, near Picton, in the British Colony of New South Wales, have invented new and useful Improvements in Receptacles or Containers for Discrete Materials Whereby Arbitrary Portions may be Withdrawn, of which the following is a specification.

This invention refers to improvements in receptacles or containers for discrete materials whereby arbitrary portions may be withdrawn whether such receptacles or containers are constructed singly or are constructed in series or a nest. These improved receptacles or containers are specially useful for tea, coffee, flour, meal, rice, and such like articles, and larger sizes for grain, bran, pollard, corn, and, in fact, these receptacles or containers would be useful for any discrete article or articles which is or are composed of separate particles, no matter how much or less they may be intimately mixed.

These improvements in receptacles or containers for discrete materials whereby arbitrary portions may be withdrawn consist, essentially, of three main parts—namely, (*a*) a sliding vertical door adapted, either by weight or by springs, to always close downwardly whenever operated; (*b*) a wedge-shaped scoop or drawer adapted to be inserted into the receptacle under the sliding door and to thereby lift said door, and (*c*) a shelf extending from the bottom of the receptacle outwardly of the door and of the drawer or scoop.

These improvements consist, further, of the special combinations of parts hereinafter described and specifically claimed.

In order that this invention may be clearly understood, reference will now be made to the drawings herewith, in which—

Figure 1 is a perspective view, with parts broken away, of a receptacle or container constructed according to this invention. Fig. 2, on a smaller scale, is a similar view of a larger receptacle or container. Fig. 3 is a similar view of a modified construction of receptacle and container wherein the scoop or withdrawal part is made smaller than the body of the receptacle. Fig. 4 is a perspective view of a nest of six receptacles or containers constructed according to this invention. Figs. 5, 6, and 7 are front views, partly in section, of receptacles or containers, showing the construction of wedge-shaped scoop or drawer and its combination with the receptacle or container and devices, so that there shall be no leakage sidewardly of it. Fig. 8 is a perspective view of a modified construction of receptacle or container wherein the outer shelf folds upwardly by means of a spring.

Referring to Fig. 1, A is box or container, and B its sliding door, resting upon a wedge-shaped drawer whose front is marked C (having handle C′) and whose sides are marked C^2. This wedge-shaped drawer has a bottom, and its sides are triangular, forming the whole into a wedge-shaped scoop. On the sides of the body A, above the edge of the side C^2, is protector-piece A′ to prevent or minimize leakage of the material in the container between the sides C^2 and the sides of the body A. The sliding door B in this instance is curved around a stop-piece B′, the whole taking into tubes A^2, as shown at B^2. Between the top of the stop-piece B′ and the top of the tube is a helical spring B^3 under stop-piece A^3. The bottom of door B and the stop-piece B′ rest upon the top edge of the curved front C of the scoop-drawer. Now it will be seen that the container A being filled or partly filled with discrete material such portion of the contents as will fill the drawer or wedge-shaped scoop C may be withdrawn. The door B pushes downwardly as said scoop is withdrawn and smooths and straightens the contents in said scoop across its wedge-shaped edges. Any little surplus at the end which the door B pushes off the scoop will be received by the extension of bottom or shelf A^4 and be taken into the container again when the drawer or scoop is being replaced. The drawer or scoop is replaced by pushing the front edge of its bottom under the door B, and as the wedge-shaped sides are pushed inwardly the door B rises, the springs B^3 be-

ing compressed and brought into position for action again when the drawer or wedge-shaped scoop is withdrawn with another filling.

In Fig. 2 a timber construction is shown, the body being marked A, the door B, and the front of the drawer or wedge-shaped scoop C, with a handle C'. The door instead of having a spring is weighted and carries on its end friction-rollers B^4, adapted to revolve when the inclined top edge of the sides C^2 of the scoop are withdrawn or pushed in under them. The protector-piece A' stands above the edges of the sides C^2. On the shelf or extension A^4 is a spring-piece A^5, adapted to be depressed as the drawer or wedge-shaped scoop is withdrawn or inserted under the door B.

In Fig. 3 the bottom portion of the container or receptacle A tapers downwardly to the scoop or drawer receiver D, which has a withdrawal or wedge-shaped scoop having the front C, with handle C'. Above this scoop is the sliding door B in slides B^3 and having attached to its upper end the spring B^5, which will close said door B onto the bottom or shelf A^4 when the drawer or scoop is withdrawn and will allow it to rise when the drawer or scoop is inserted into the box D. The arbitrary portion of the contents of the container A are taken therefrom upon each withdrawal of the drawer or wedge-shaped scoop, the door B running on the inclined edges of said drawer or scoop and smoothing the top of the contents.

In Fig. 4 each container is marked A, each door B, and the front of each drawer or wedge-shaped scoop C, with its handle C'. The doors B slide in cleats or grooves on the side of the divisional pieces between each receptacle or container. It will be seen that each of the drawers may be of different sizes, those shown being in pairs from the center. The doors B are actuated by the springs B^5, allowing of the desired motion upwardly and downwardly. Although these drawers or scoops are shown of different sizes—that is, having different vertical heights in the front—yet in practice it is preferable to make any increase of size of the drawers or scoops laterally instead of vertically, so as to retain an easy angle on the top of the edge of the sides of the scoop.

In Fig. 5 the protector-pieces A' are of some length and overlap the sides C^2 of the scoop. In Fig. 6 the protector-pieces A' take only on top of the sides C^2, while in Fig. 7 the sides of the body A are bent outwardly, so that the inside of sides C^2 are flush with or just underlie the sides of the body A. Various other modifications of these sides might be devised to result in the object aimed at—namely, to prevent the leakage of the contents of the container between the sides C^2 and the sides of the body.

The shelf or bottom extension A^4 of the containers is for the purpose described of saving any slight fallings off the end of the wedge-shaped scoop or drawer. The operation of each of the wedge-shaped scoops or drawers in each of the containers is exactly similar to that previously described with reference to Fig. 1.

It is to be understood that in all cases the slope of the sides of the scoop requires to be a gentle one, so that the scoop will act on the sliding doors with ease.

In Fig. 8 a similar construction of receptacle or container to that shown in Fig. 4 is illustrated; but in this case the shelf or extension A^4 instead of being fixed is cut off and has the two parts hinged or knuckle-jointed together and has springs A^6 underneath it, so that it will hinge upwardly, as shown in the figure, after the drawer or scoop is inserted in place, bending downwardly to allow the drawer or scoop to be withdrawn.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

In receptacles or retainers of the class set forth, the combination with the body thereof, of a sliding vertical door, adapted normally to press downwardly, of a scoop or drawer adapted to slide under said door, having side wedge-shaped side walls to engage the door to slide the same upward to open the same, and the front wall of the scoop or drawer being normally in line with the front wall of the body, said body having a drawer-supporting extension, and a leaf hinged to said extension and adapted to be swung across the path of movement of the drawer.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SIDNEY R. BELLINGHAM.

Witnesses:

FRED WALSH,

PERCY NEWELL.