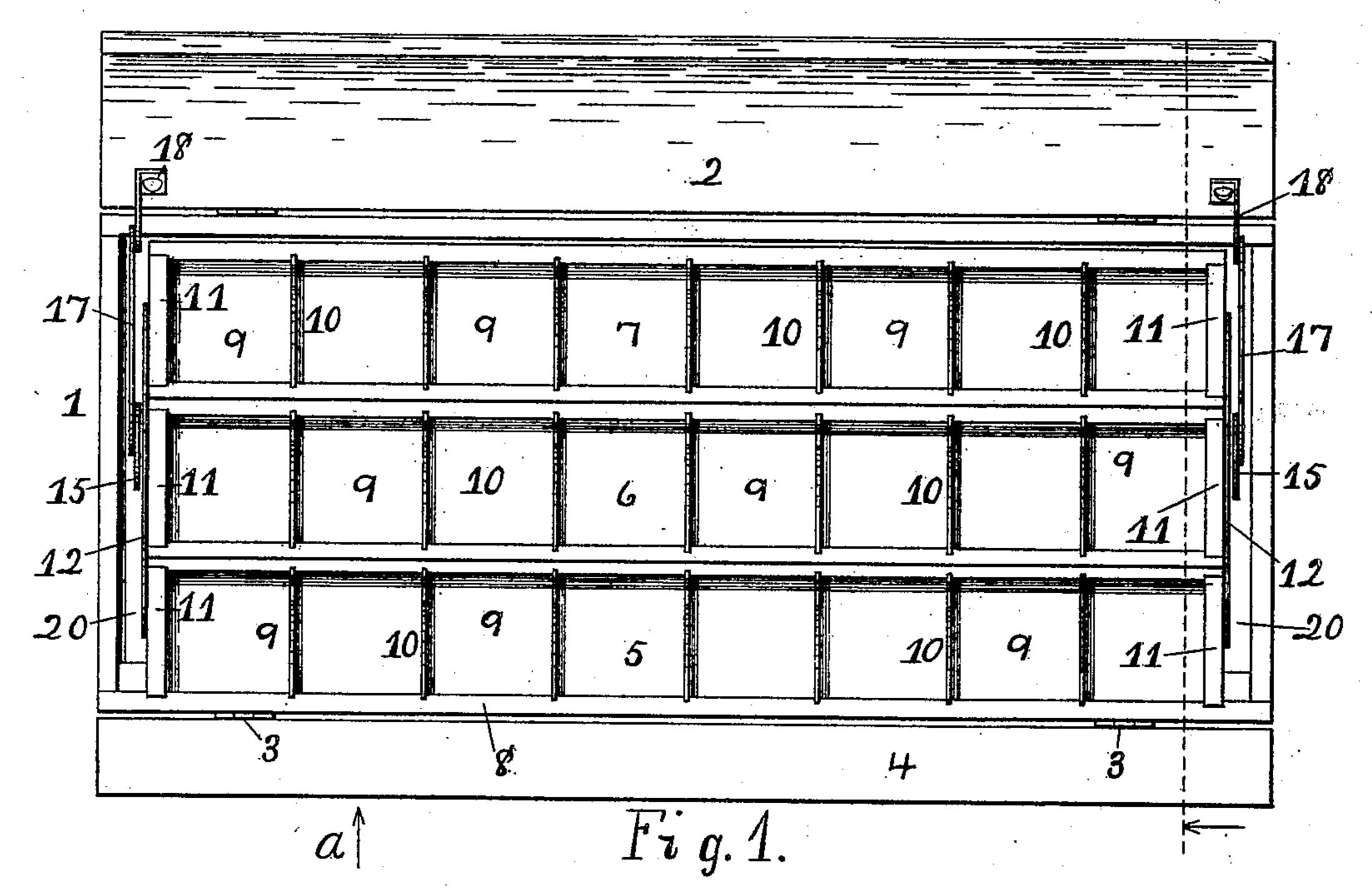
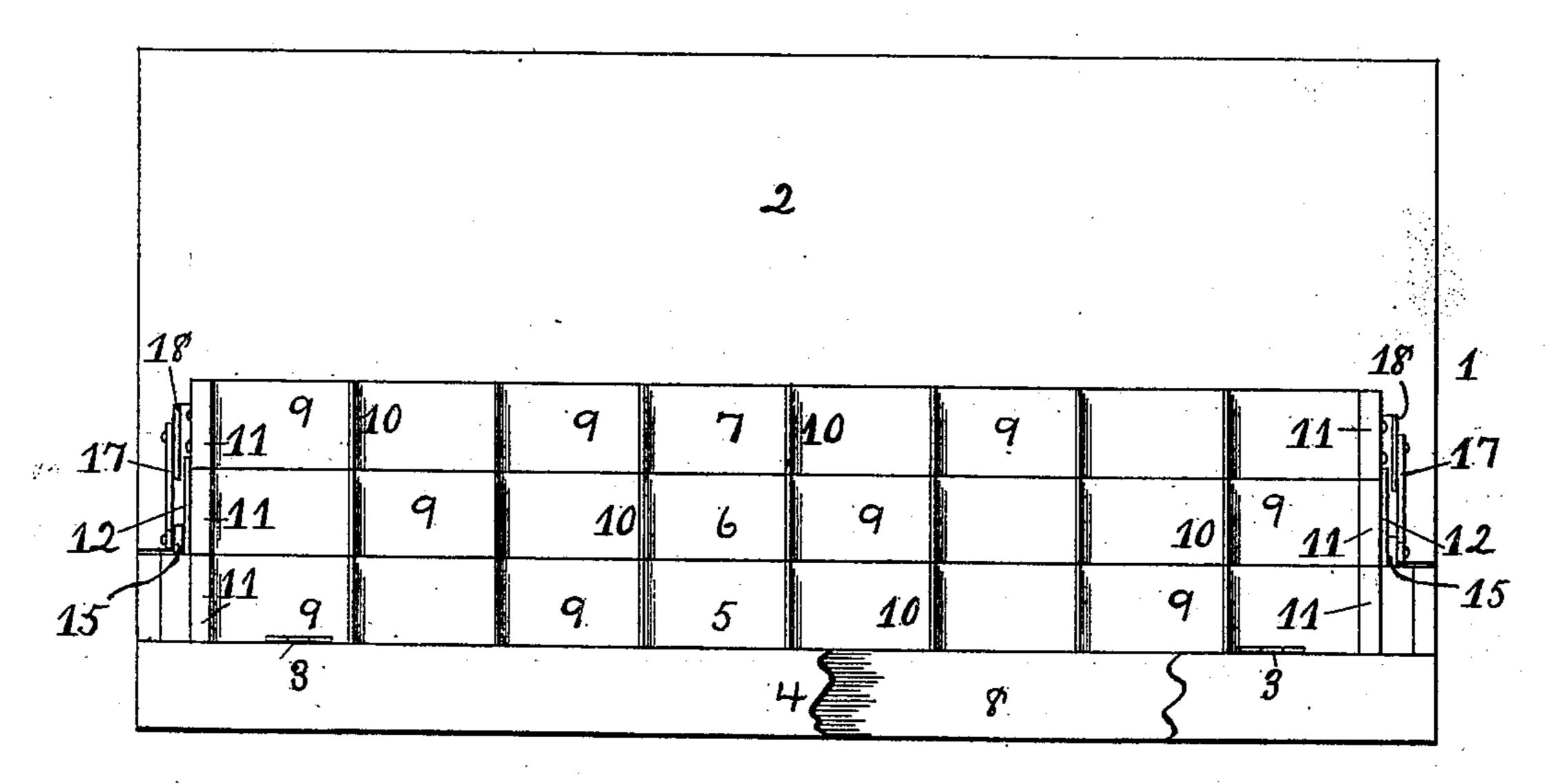
# F. G. MERRITT.

## SHIPPING AND DISPLAY BOX.

APPLICATION FILED JUNE 15, 1907.

2 SHEETS-SHEET 1.





Fi g. 2.

Attest: A. M. Whitmore, J. C. Wooden.

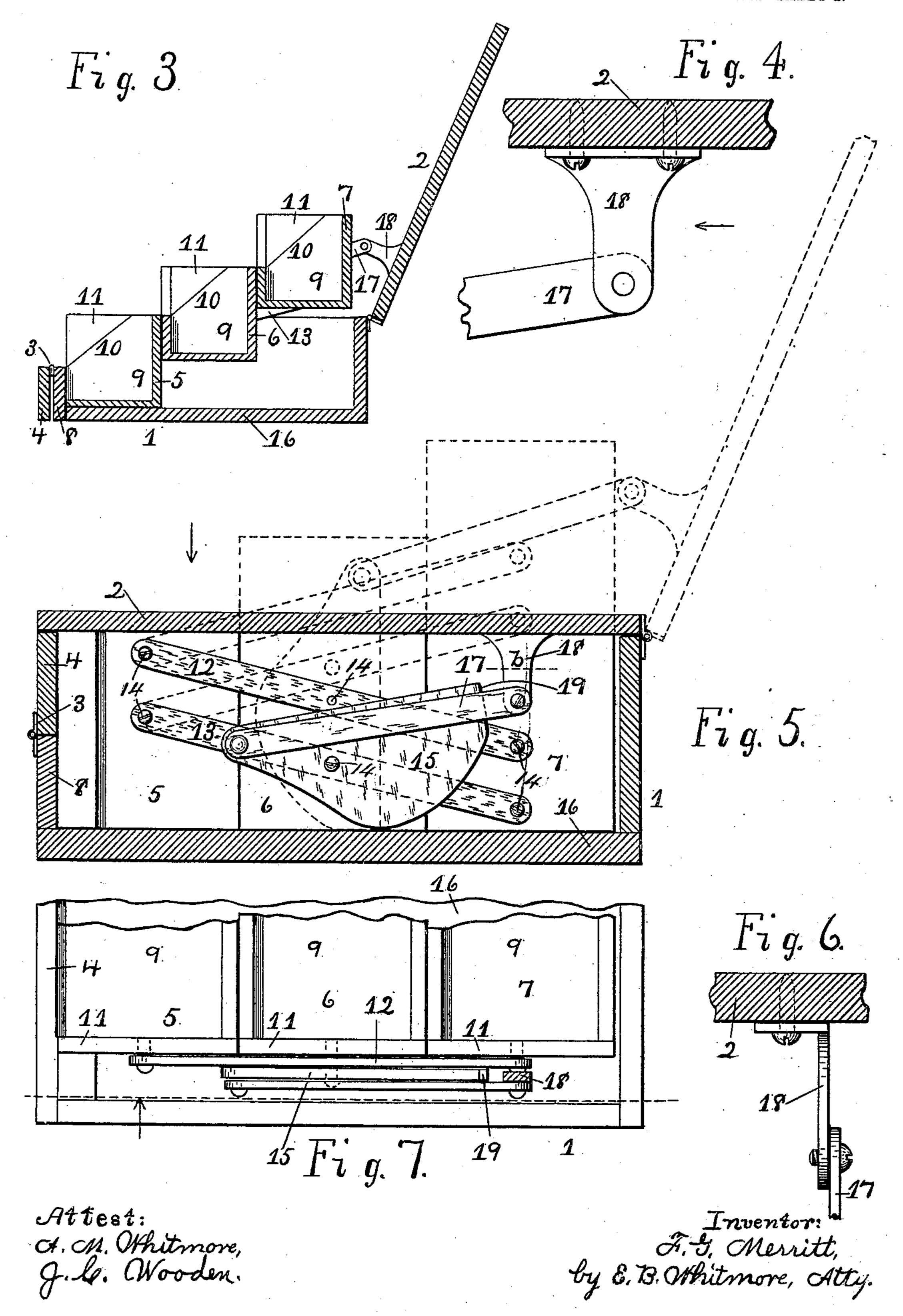
Invontor: F. G. Merritt, by E. B. Whitmore, Atty

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# UNITED STATES PATENT OFFICE.

FURBUSH G. MERRITT, OF BROCKPORT, NEW YORK.

#### SHIPPING AND DISPLAY BOX.

No. 886,388.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed June 15, 1907. Serial No. 379,199.

To all whom it may concern:

Be it known that I, Furbush G. Merritt, of Brockport, in the county of Monroe and State of New York, have invented a new and useful Improvement in Shipping and Display Boxes, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

My invention is an improved device both 10 for shipping and displaying small commercial articles, as garden seeds, and the like, kept on sale in seed stores or other places.

This device is a box or inclosure commonly prismatic in form, with a hinged cover, and containing a series of fixed and movable tills cross-divided into numerous small apartments or pockets for receiving the seeds.

Mechanism is provided at the ends of the box connected with the hinged lid or cover so that when the latter is swung open and inclined backward the movable tills will be lifted, one more rapidly and higher than the one in front, thus forming a series of steps from front to rear of the box. A closing of the lid serves to cause the elevated tills to resume their normal places side by side within the box, the lid covering the whole.

Other objects and advantages of the invention will be brought out and made to appear in the following description and the novel features particularly pointed out in the appended claims, reference being had to the accompanying drawings which, with the reference numerals marked thereon, form a

35 part of this specification.

Figure 1 is a plan of the box open and as in use. Fig. 2 is a front view, indicated by arrow a in Fig. 1, a part being broken away. Fig. 3 is a vertical cross section of the parts 40 taken as on the dotted line in Fig. 1, showing the box open and the trays elevated. Fig. 4 is a side elevation of a hanger and associated parts, the adjacent portion of the cover being in vertical transverse section. Fig. 5 is a 45 vertical transverse section of the box taken on the dotted line in Fig. 7, showing the elevating mechanism for the tills at one end of the box, parts being shown in two positions by full and by dotted lines. Fig. 6 is a lon-50 gitudinal section of a portion of the cover the hanger being shown as indicated by arrow in Fig. 4. Fig. 7 is a plan of parts at one end of the box seen as indicated by arrow in Fig. 5, further showing the elevating mechanism, 55 the hanger being transversely sectioned on the dotted line b in said figure. Figs. 4 to 7

inclusive are drawn to scales larger than that of Figs. 1, 2 and 3.

Referring to the parts shown, 1, in the various figures, is the body of the device, commonly made of wood, it being a prismatic box-shape inclosure with hinged lid or cover 2. The front side of the box is divided longitudinally into equal upper and lower parts 4 and 8, the two parts being joined by hinges 65 3 so that when the upper part 4 is swung outward or down, as appears in Figs. 1, 2 and 3, the front till and parts within it will be brought into view.

As shown the box or body 1 is supplied 70 within with three independent and substantially equal and similar tills 5, 6 and 7, the first named or front till being rigidly in place within the box and the other two tills being adapted to move in vertical directions. The 75 part 8 of the front of the box constitutes the front wall of the forward till 5, the front walls of the several tills being lower than their rear walls, as clearly appears in Fig. 3.

The tills are divided into small apartments 80 9, Figs. 1, 2, 3 and 7, by thin cross partitions 10, said partitions having their upper edges slanted downward to meet the respective low front walls of the tills, the end walls 11 of the tills being rectangular as shown, so that 85 when the cover 2 is down the tills shall con-

stitute complete inclosures.

The tills 5, 6 and 7, are adapted to rest normally side by side directly upon the floor or bottom 16 of the box 1, as shown in Fig. 5, 90 for handling, shipping or storing the packages, the cover 2 being closed over the whole. The device is constructed, however, so that by lifting the cover or swinging it back to the inclined position shown in Figs. 3 and 5, the 95 rear or movable tills will be unevenly elevated, as appears in said figures. When the tills are elevated, as stated, the upper edge of the front wall of each till will be even with the upper edge of the rear wall immediately 100 in front of it, as clearly appears in Fig. 3.

in front of it, as clearly appears in Fig. 3.

The elevating mechanism for the tills is described as follows: The three tills are connected at their ends, on the outside, by a pair of equal parallel bars 12 and 13, Figs. 1, 5 105 and 7, each being held by pivotal bearings 14 to each till. The end bearings of the bars are in two vertical lines the middle bearings being likewise in a vertical line, said middle bearing of each bar being midway between 110 the two end bearings of the bar. A vertically acting cam 15 is held upon the middle

pivot or bearing of the lower bar 13 in position to have its lower curved edge or cam face bear against the bottom board 16 of the body 1, as shown. A link or connector 17 5 connects one extreme end of the cam 15 with a hanger 18 projecting downward from the inner surface of the cover 2 by means of which when the cover is lifted and swung back the cam will be turned to a standing or vertical position, as appears in dotted lines in Fig. 5. But it will be seen that as the cam thus turns its pivot bearing 14 will rise or be lifted serving to lift the middle till 6 and the parallel bars 12 and 13, the lifting of which bars serving to elevate the rear till 7, the moving parts taking the various positions shown by dotted lines in Fig. 5. During these movements of the parts the parallel bars 12 and 13 act as levers of the third order 20 the pivot bearings on the fixed till 5 serving as fulcrums for the levers. The bearings on the till 5 being held against vertical motion the rear till 7 will move upward and downward twice as rapidly as the middle till 6 and 25 consequently be lifted twice as high, on account of which the three tills will assume the relative positions shown in Fig. 3 when the cover is turned back to its open position.

This mechanism for lifting the tills is the 30 same at each end of the box save that at the two ends it is right and left, the tills moving upward and downward evenly as the cover is turned up or down. The two cams have their bearing ends or points 19 made straight 35 for a short distance to rest evenly upon the floor 16 of the box 1 when raised to standing

positions, as described.

The tills 5, 6 and 7, are shorter than the interior of the box or body 1, there being nar-40 row end-chambers or spaces 20, Figs. 1, 5 and 7, within the box at the ends of the tills in which to receive the two sections or parts of the elevating mechanism described.

What I claim as my invention and desire

45 to secure by Letters Patent is:

1. A shipping and display box having a series of tills, some movable and the remainder fixed, means pivotally connected with all of the tills, means cooperating with said pivotal 50 means for simultaneously lifting the movable tills to positions of different elevations and means engageable with the bottom of the box to assist in lifting the tills to their ele-

vated positions and there supporting them.
2. A shipping and display box having a series of tills adapted to rest upon the bottom of the box, one of the tills being fixed within the box and the others movable, and means pivotally connected with all of the series of tills for simultaneously lifting the movable tills at different degrees of rapidity and means coöperating with said means to assist in lifting the tills and for holding them in their elevated positions.

3. A shipping and display box having a se-

ries of similar and equal independent tills. adapted to rest side by side within the box one fixed and the others vertically movable, the rear walls of the tills being higher than the front walls, and means pivotally con- 70 nected with all of the series of tills for raising the movable tills to positions in which the upper edge of the front wall of each till is even with the upper edge of the rear wall of the till in front and means bodily movable 75 with said means for raising the tills and supporting them in their raised position.

4. A shipping and display box having a fixed front till and rear movable tills, the front walls of the tills being lower than the 80 rear walls, and means pivotally connected with all of the series of tills for simultaneously raising the rear tills to positions in which their front walls respectively shall be even with the rear walls of the tills immedi- 85 ately in front, and means bodily movable with said means for raising the tills and supporting them in their raised position the front side of the box being horizontally divided with the upper part movable to par- 90 tially expose the front till.

5. A shipping and display box having a series of tills within some fixed and others movable, a hinged cover for the box and means pivotally connected with all of the series of 95 tills and connected with the cover for lifting the movable tills as the cover is raised to open the box and means bodily movable with said means for raising the tills and supporting them in their raised position.

6. A shipping and display box having a series of tills the front till being fixed and the others movable, and a hinged cover for the box, a pair of parallel bars joined pivotally to the ends of the tills, a cam joined pivotally 105 to one bar of each pair, and bearing on the bottom of the box and a member connecting one end of each cam with a part on the cover.

7. A shipping and display box having a series of three equal tills the front till being 110 fixed within the box and the rear tills movable, and a hinged cover on the box, a pair of parallel bars joined pivotally to the ends of the tills, a lifting cam joined pivotally to the lower bar of each pair with the lower 115 ends of the cams resting against the floor of the box, a connector for the opposite end of each cam and a part projecting from the cover by means of which when the cover is swung open and inclined backward the rear 120 tills will be raised to different positions of elevation, the tills being divided by cross partitions into series of apartments.

8. A shipping and display box having a series of tills within shorter than the box, and 125 spaces within the box at the ends of the tills, one till being fixed and the other movable, a hinged cover for the box, and mechanisms within said spaces for lifting the movable tills, said mechanisms comprising parallel 130

100

bars pivotally connected with the tills, cams held upon the pivot of one of the bars and being operated by the swinging of the cover said cams bearing on the bottom of the box and movable from a horizontal to a vertical position as the cover is opened.

9. A shipping and display box having a series of tills, parallel bars pivotally connected with each row of tills, a cam pivotally connected nected with one of said bars, a cover and a connection between the cam and the cover

whereby as the cover is moved the cam engages the bottom of the box and lifts the tills.

In witness whereof, I have hereunto set 15 my hand this 13th day of June, 1907, in the presence of two subscribing witnesses.

#### FURBUSH G. MERRITT.

Witnesses:

E. B. WHITMORE, A. M. WHITMORE.