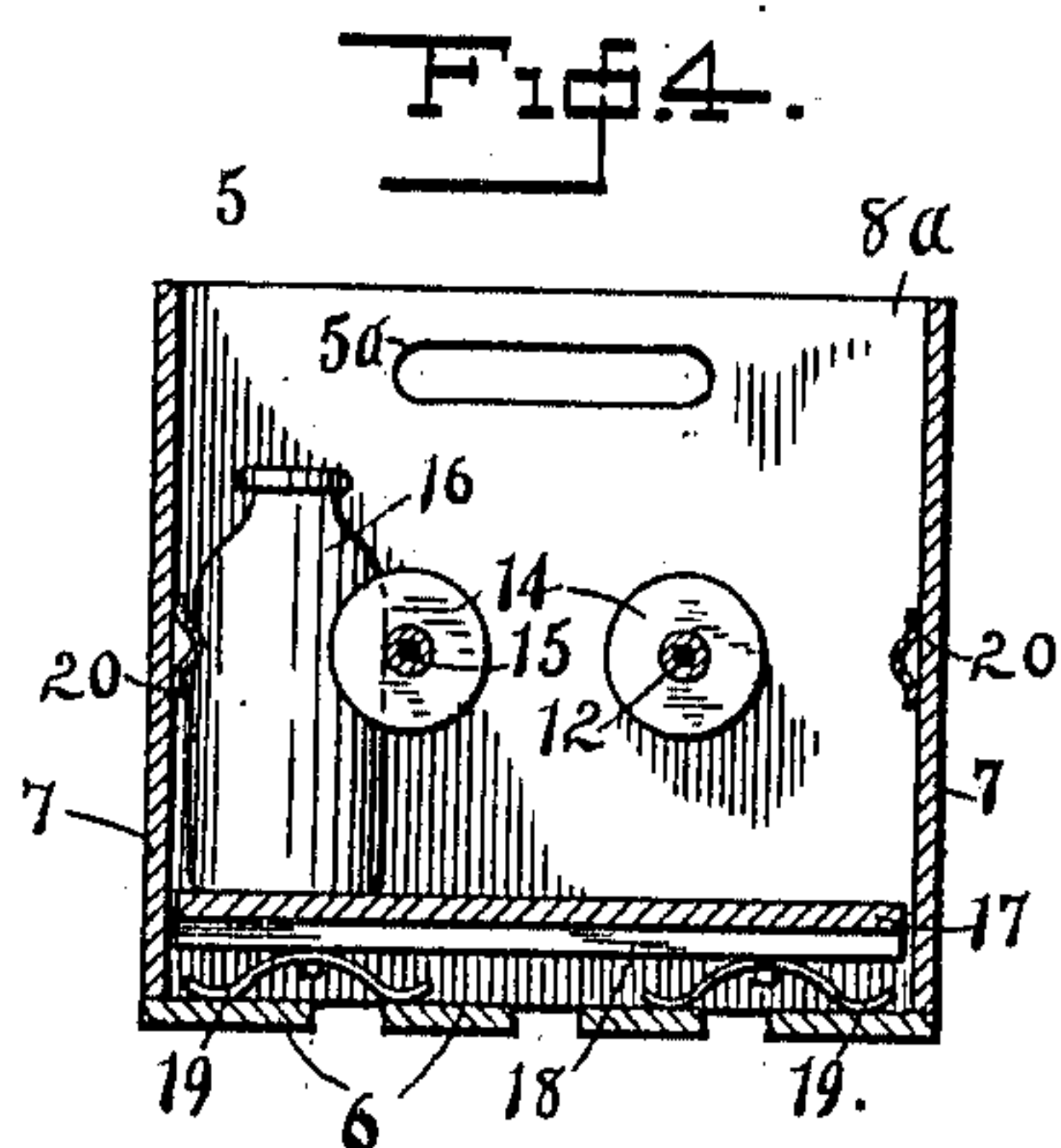
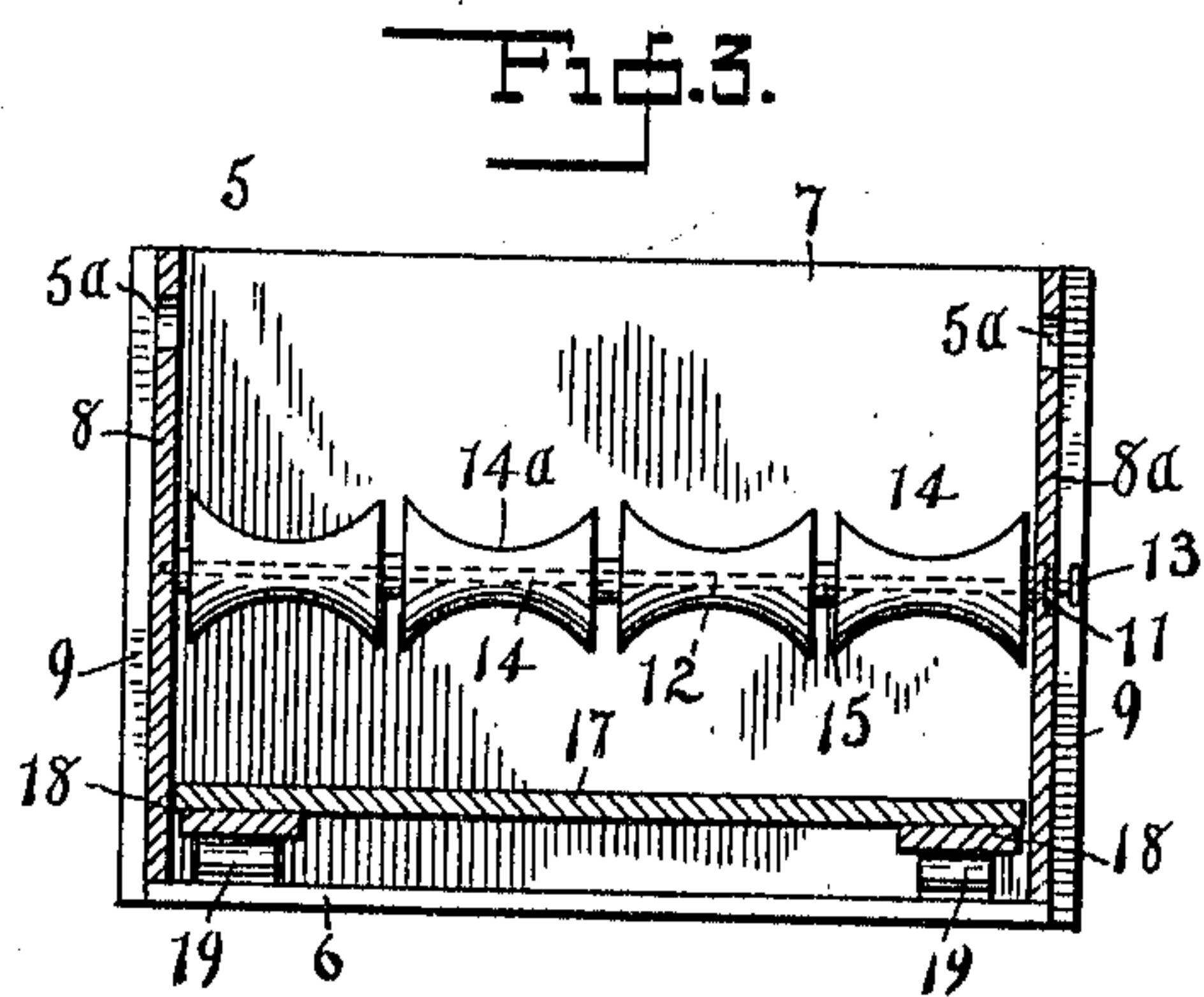
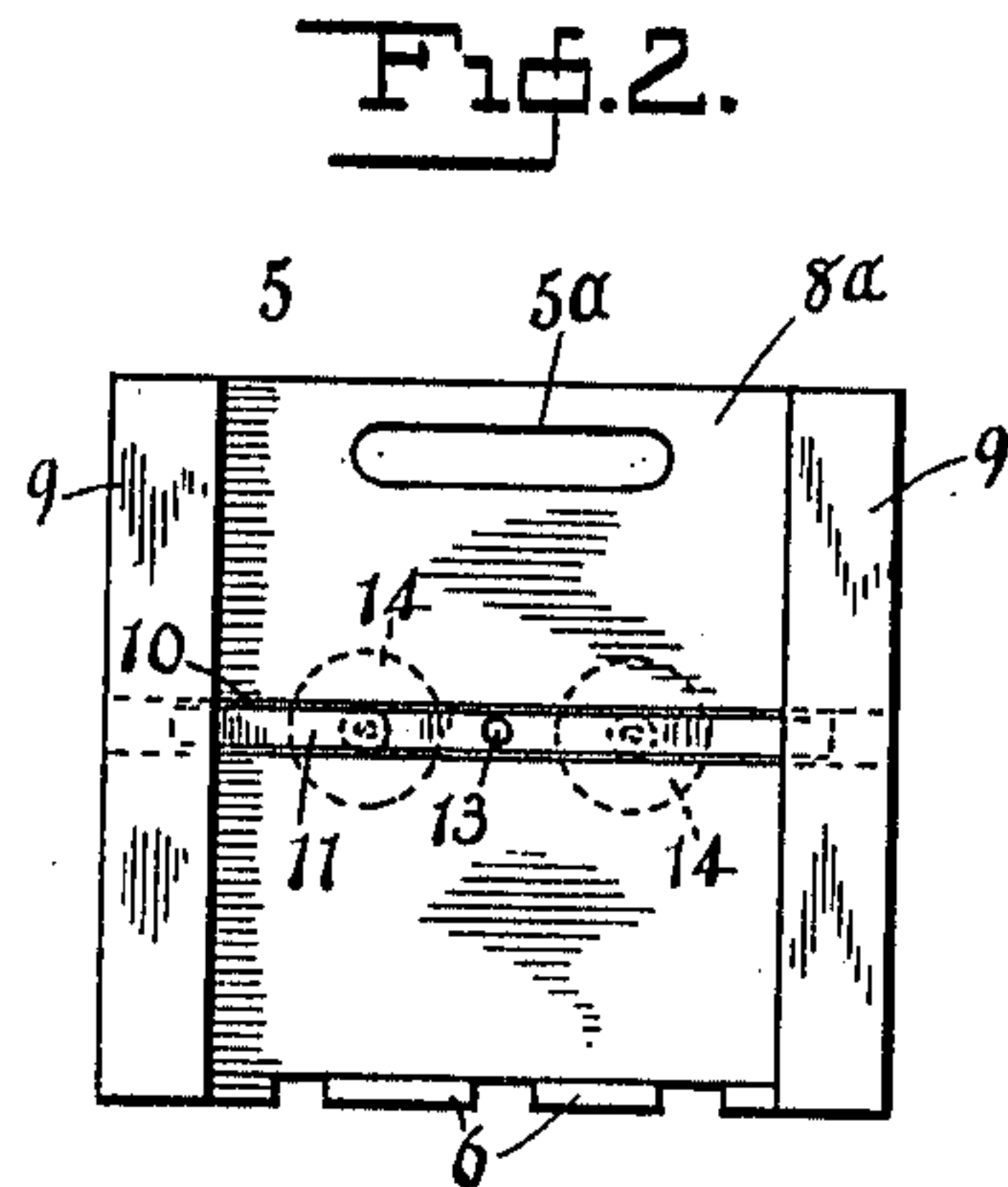
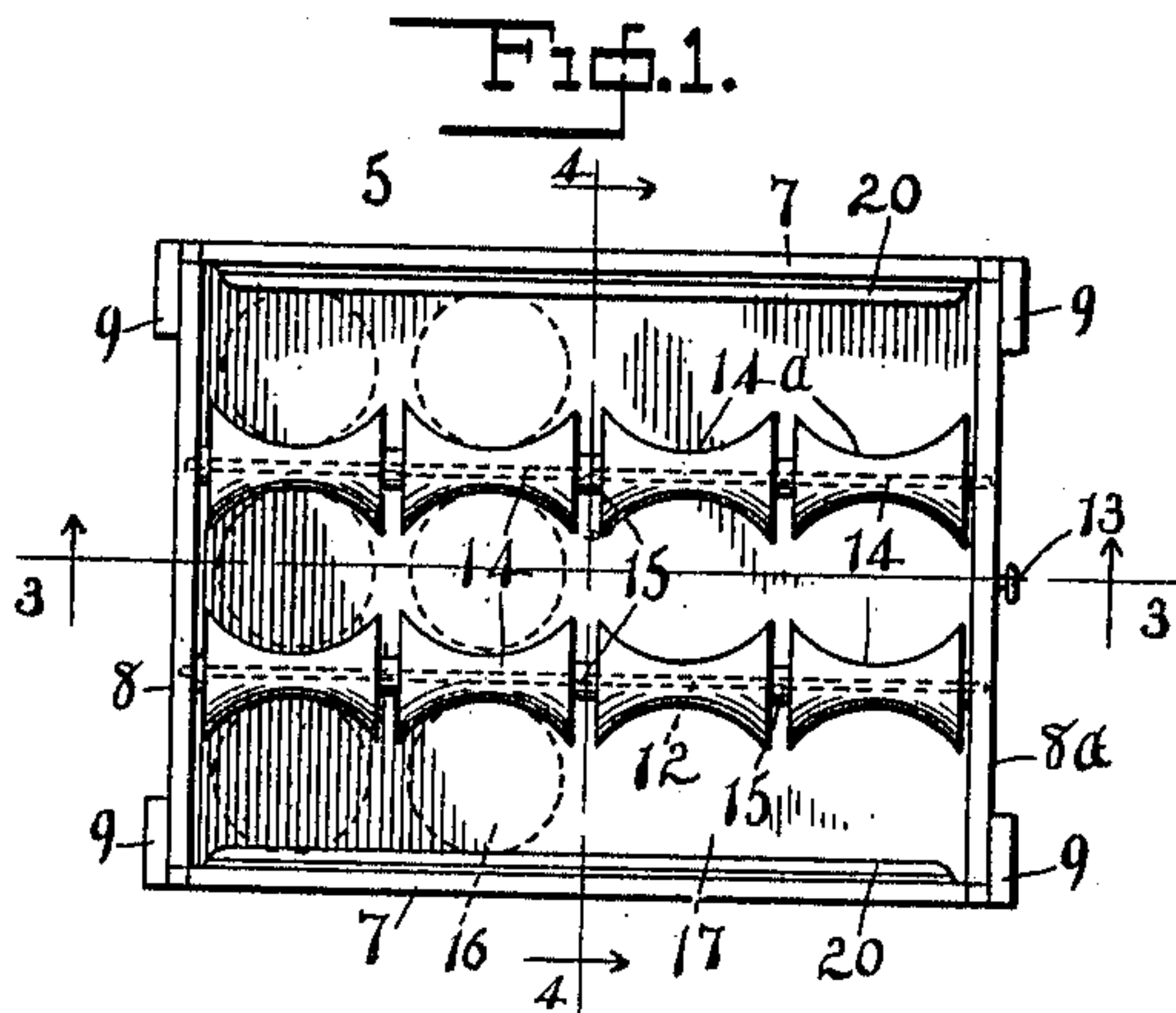


M. F. FLYNN.
BOX FOR BOTTLES.

APPLICATION FILED MAR. 29, 1907. RENEWED MAY 20, 1909.

945,121.

Patented Jan. 4, 1910.



WITNESSES:

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MAURICE F. FLYNN, OF CHICAGO, ILLINOIS.

BOX FOR BOTTLES.

945,121.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MAURICE F. FLYNN, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Boxes for Bottles, of which the following is a specification.

My invention relates to containers for bottles and refers more particularly to boxes or cases for handling and transporting filled or empty bottles, and is especially adapted to the requirements necessary for delivering bottles of milk or other liquids where the contents of the case are being constantly changed by removal and replacement.

The chief objects of my invention are to provide a container for bottles that will prevent breakage under the ordinary methods of transporting and handling; to afford ready access to the contents of the case, and to afford equal protection to the bottles when the case is partly empty as when entirely filled.

A further object of my improved bottle case is to furnish a construction that will permit of the ready removal of the various devices so that every part can be thoroughly cleaned, and any damaged or defaced portions quickly replaced.

When wood partitions for separating the bottles are employed great inconvenience is met with in the tendency of the slotted partition members to become broken from the jars and shocks which will occur even with the ordinary methods of handling. The construction with wooden partitions is also objectionable because of the tendency to warp and swell from the moisture which is wont to condense upon the containers under certain conditions. Another source of disadvantage lies in the inability to properly cleanse the casing, unless the partitions are entirely removed, and when the said partitions are swollen this will be difficult of accomplishment without danger of breaking the frail structure.

I accomplish the above and other objects and avoid many disadvantages by the appliance illustrated in the accompanying drawing which forms a part of this specification, in which:

Figure 1 is a plan view of my improved bottle holding case; Fig. 2 is an end elevation; Fig. 3 is a sectional view on the line 3—3 of Fig. 1, and Fig. 4 is a sectional view on the line 4—4 of Fig. 1.

Referring to the drawing in detail, the numeral 5 indicates a rectangular box or case preferably constructed of wood, and formed with a bottom composed of strips or slots 6 spaced apart, side boards 7, and end pieces 8, 8^a, the ends being furnished with strengthening cleats 9 in the usual manner followed in box construction. The said end pieces are provided with hand holes 5^a for convenience in handling the case.

Extending longitudinally between the end pieces are parallel rods 12 which pass through holes in the end 8^a and are received in sockets in the end 8. These rods are held in position by a stop plate 11 which is fitted in a groove 10 in said end 8^a, and is provided with a handle in the form of a knob 13, by means of which the slide may be readily removed when it is desired to take out said rods 12, the strip or plate 11 being made shorter than the width of the box, for that purpose. Upon said rods 12 are arranged a series of reels or spools 14 corresponding in number with that of the bottles which the case is designed to hold. The concave surfaces 14^a of the spools are formed with a curvature approximating that of the bottles 16 for which they are fitted, and are spaced apart by collars 15 which are slipped loosely upon the rods as are also the spools. Upon the fixed bottom slats 6 is supported a false bottom 17, furnished with cleats 18 provided on the under side with several flat springs 19 which rest upon the fixed bottom, affording a yielding foundation for the bottles to rest upon and tending to break the force of any unusual shocks which may be given the case from below. In order to avoid the waste space which would result if the spools were strung along the sides of the box, I provide a fender or cushion 20 which is secured to each side on a plane with the centers of the spools. I prefer to form these cushions of flat strips of rubber suited to the purpose, each edge being tucked or nailed to the side board leaving a redundancy of the material to form a projecting ridge against which the outside rows of bottles are wedged under movement.

The method of using my bottle handling case will be readily understood since it does not differ materially from that employed where separate rectangular cells are formed by means of notched partitions.

The bottles are placed snugly in the di-

visions, the spools having sufficient play upon their supporting rods to yield and turn thereon when there is unusual pressure laterally thus acting like pulleys to relieve the friction when the containers are inserted or replaced.

It will be seen that the bottles are held in every direction by yielding and resilient members, and no other packing such as straw or saw dust will be needed, thus affording a safe, convenient and sanitary means for handling and transporting bottles of every description.

What I claim as new, is:—

1. In a box for holding and transporting bottles, a plurality of removable parallel rods, a series of revoluble concaved spools arranged at spaced intervals upon said rods, spacing collars between the spools, fending cushions attached to the inner sides of the casing opposite said spools, an open fixed

bottom for the box, a removable floor, and a series of springs arranged beneath said floor.

2. In a box for holding and transporting bottles, a plurality of removable parallel rods, engaging sockets in one side of the box and holes in the opposite side, a stop plate covering said holes, a series of concaved spools arranged at spaced intervals upon said rods, spacing collars between the spools, fending cushions attached to the inner sides of the casing, opposite said spools, an open fixed bottom for the box, a removable floor, and a series of flat springs arranged between the floor and said fixed bottom.

In testimony whereof I affix my signature in the presence of two witnesses.

MAURICE F. FLYNN.

Witnesses:

F. BENJAMIN,
JAMES B. POYNTON.