(No Model.)

T. F. CRARY.

SELF MEASURING STORE CASE.

No. 476,610. Patented June 7, 1892.

Fig. 1.

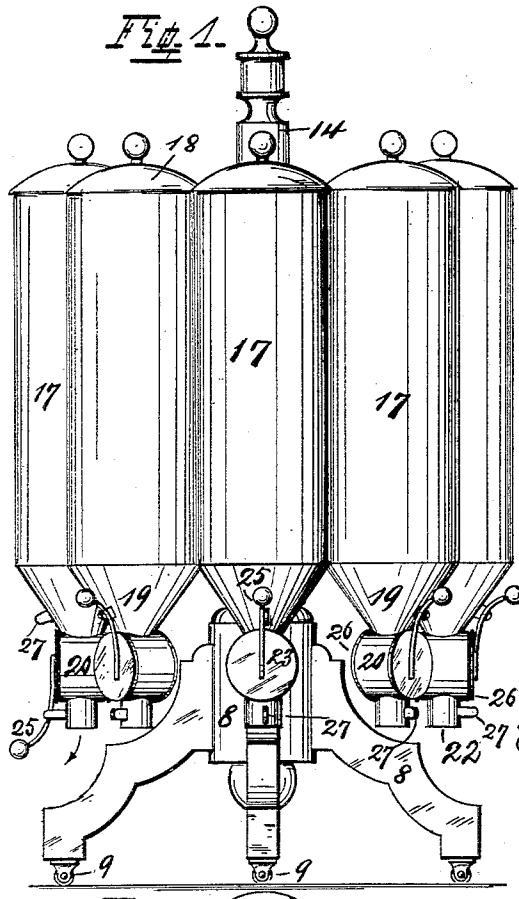

Fig. 2.

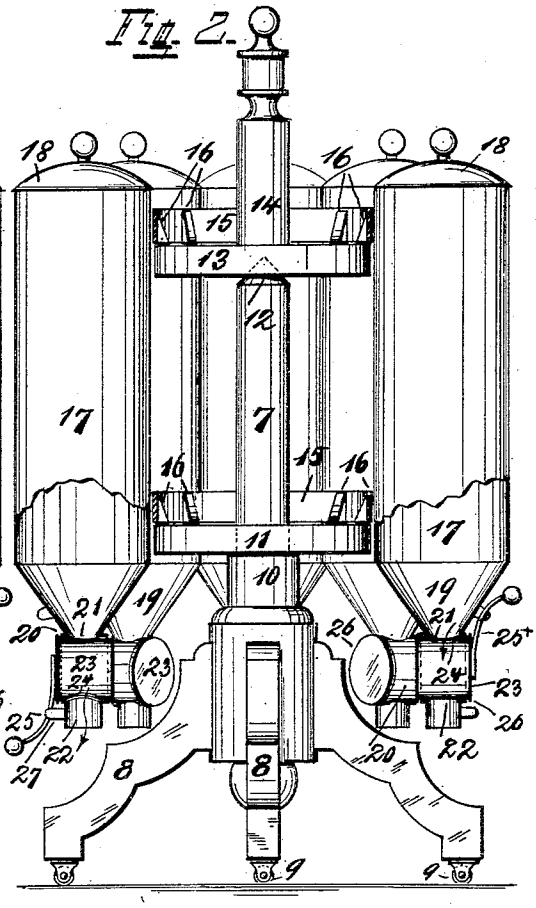

Fig. 3.

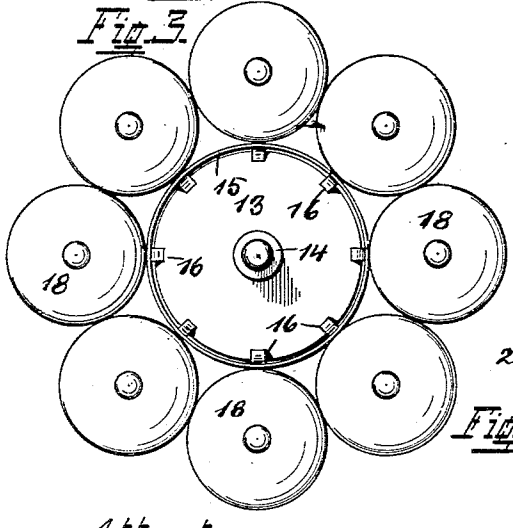

Fig. 4.

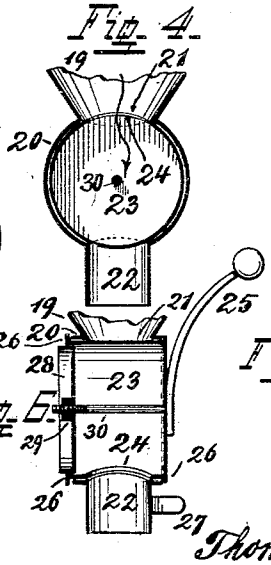

Fig. 5.

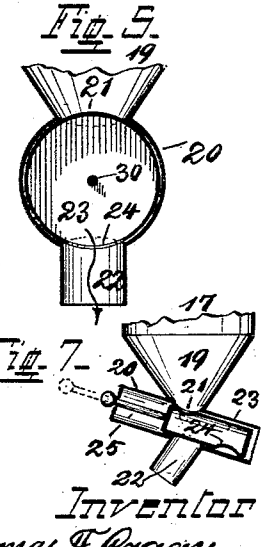

Fig. 6.

Fig. 7.

Attest
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Thomas F. Crary.
by Carl Spengel Atty.

UNITED STATES PATENT OFFICE.

THOMAS FREDERICK CRARY, OF MIDDLEPORT, OHIO, ASSIGNOR OF ONE-HALF TO FRANK W. McLEAN, OF SAME PLACE.

SELF-MEASURING STORE-CASE.

SPECIFICATION forming part of Letters Patent No. 476,610, dated June 7, 1892.

Application filed August 10, 1891. Serial No. 402,198. (No model.)

To all whom it may concern:

Be it known that I, THOMAS FREDERICK CRARY, a citizen of the United States, residing at Middleport, in the county of Meigs and State of Ohio, have invented certain new and useful Improvements in Self-Measuring Store-Cases; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to store-furniture of the kind where a number of cases or cans are arranged and supported in a group and each provided with an individual stationary measuring attachment at their outlet; and the novelty resides in the construction whereby these cans are united and supported, in a measuring attachment operated in a particular novel manner, and in the specific means whereby this particular or any other similar measuring attachment may be adjusted as to its exact cubic capacity, all of which is explained in the following description, and illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of my store-case complete. Fig. 2 is a central vertical section through the same. Fig. 3 is a top view of the device. Figs. 4 and 5 are vertical sections through the measuring attachment, showing the same closed and open, respectively. Fig. 6 is also a vertical section through this attachment, but taken at right angles to Fig. 5. Fig. 7 shows in a similar view the preferred form of attachment.

While this case was devised principally for use in connection with the storage and retail sale of shot, for which use it is eminently well suited, it may of course be used in connection with any other merchandise of a similar nature.

7 is an upright standard rising from a suitable base 8, preferably resting on casters 9. At 10 it is provided with a shoulder to support a shelf 11, which is perforated in its center to permit it to be slipped down upon the said shoulder. At its upper end at 12 standard 7 is pointed or otherwise suitably arranged to support another shelf 13, similar to shelf 11. Beyond shelf 13 standard 7 may be continued at 14, but for ornamental reasons only. This construction of the standard in two parts is necessary in order to permit the lower rests on the vessels or cans to pass down to the lower shelf when the structure is set up, as will be better apparent in the later course of this description. The diameter of the shelves is of a size to correspond to the clear opening or space inclosed by the cans after they are circularly connected, which is done before they are placed upon the shelf. The manner of so connecting the cans consists of connecting them to rings or bands 15 of proper size, and also connect them laterally at their points of contact to each other by the application of solder. On their inside these bands are provided with rests or supports 16, which rest on shelves 11 and 13, and thus hold up the body of connected cans.

17 are the cans, preferably of tin, provided with lids 18 and tapering inwardly toward their outlet at 19. Below this tapering part, and connected to it, is a circular valve-chamber 20, communicating at 21 with the interior of the can and open at 22.

23 is the combined closing valve and measure, fitting snugly inside of the chamber 20 and open at 24. While this latter opening registers with opening 21 the measure is filling and at the same time closing the can, which position is the normal one of the former, and puts it in ready condition for immediate use. When it becomes desirable to draw on the supply of the cans, valve or measure 23 is operated to bring its opening 24 opposite opening 22, thereby permitting the measure to discharge its contents. Opening 21 of the can is meanwhile kept closed by the imperforate part of measure 23 and the further escape of any of the contents from the can beyond that which has been measured is prevented. When the weight of the material stored in the cans permits it, the lower set of supports 16 may be omitted, leaving the body of cans to rest on the upper shelf only, which may be so arranged, for the sake of convenience, as to be capable of rotation upon the standard.

Inasmuch as any suitable kind of measur-

ing attachment may be used in connection with my store-case I have illustrated the same as provided with one of the older forms of measuring attachments. The form I prefer to use, however, is illustrated in Fig. 7, and consists of a longitudinally-sliding chamber 23, having two openings 24, one on its upper and one on its lower surface. When the upper opening is opposite opening 21 in the case, the measure fills, while when the lower opening is opposite opening 22 the measure discharges. These openings 24 are so located in the measure that direct communication between openings 21 and 22 is impossible while either one of these openings registers with one of the openings 24.

In order to regulate the size of the measure properly and accurately, especially where it is to represent a given weight, it is desirable to have the same adjustable. This I accomplish by having one of the heads movable, as shown at 28 of Fig. 6. This head is provided with an interiorly-screw-threaded boss or nut 29, through which a stationary screw-threaded stud 30 passes, which supports the head and on which it turns, the said stud being rigidly secured to the stationary head. The details of this construction are shown in Fig. 6 in connection with one of the older forms of measuring attachments, because it is capable of use on either kind.

Having described my invention, I claim as new—

1. A store-case consisting of a number of cans or vessels having discharge-openings at their lower ends and circularly arranged, in combination with a central supporting-standard provided with shelves on which the cans rest, said supporting-standard being in two sections separable from each other and each carrying one of the shelves, all substantially as shown and described.

2. A store-case consisting of a group of cans having individual measuring attachments and connected to each other by soldering, preferably, rings or bands to which the so-united group is affixed, rests connected to and interiorly projecting from said rings, shelves upon which said rests are supported, and a central standard from which said shelves extend, all substantially as shown and described.

3. A store-case consisting of a group of cans, having individual measuring attachments and connected to each other, preferably by soldering, two rings or bands to which the so-united group is affixed, rests connected to and interiorly projecting from said rings, and a central standard carrying two shelves, one for each band, their rests being supported thereon, one of said shelves resting on a shoulder on said standard, the other on the pointed upper end of the same, all substantially as shown and described.

4. In cylindrical measuring attachments of the kind shown, the means to regulate their cubic capacity, which means consists of a stationary screw-threaded stud 30, rigidly connected at the center of one of the heads of the measure, a movable head having a boss 29, screw-threaded interiorly and capable of engagement with stud 30, and a flange provided on this movable head to hold it straight and guide it evenly, all substantially as shown and described.

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

THOMAS FREDERICK CRARY.

Witnesses:

J. F. DOWNING,

W. E. ARCHER.