

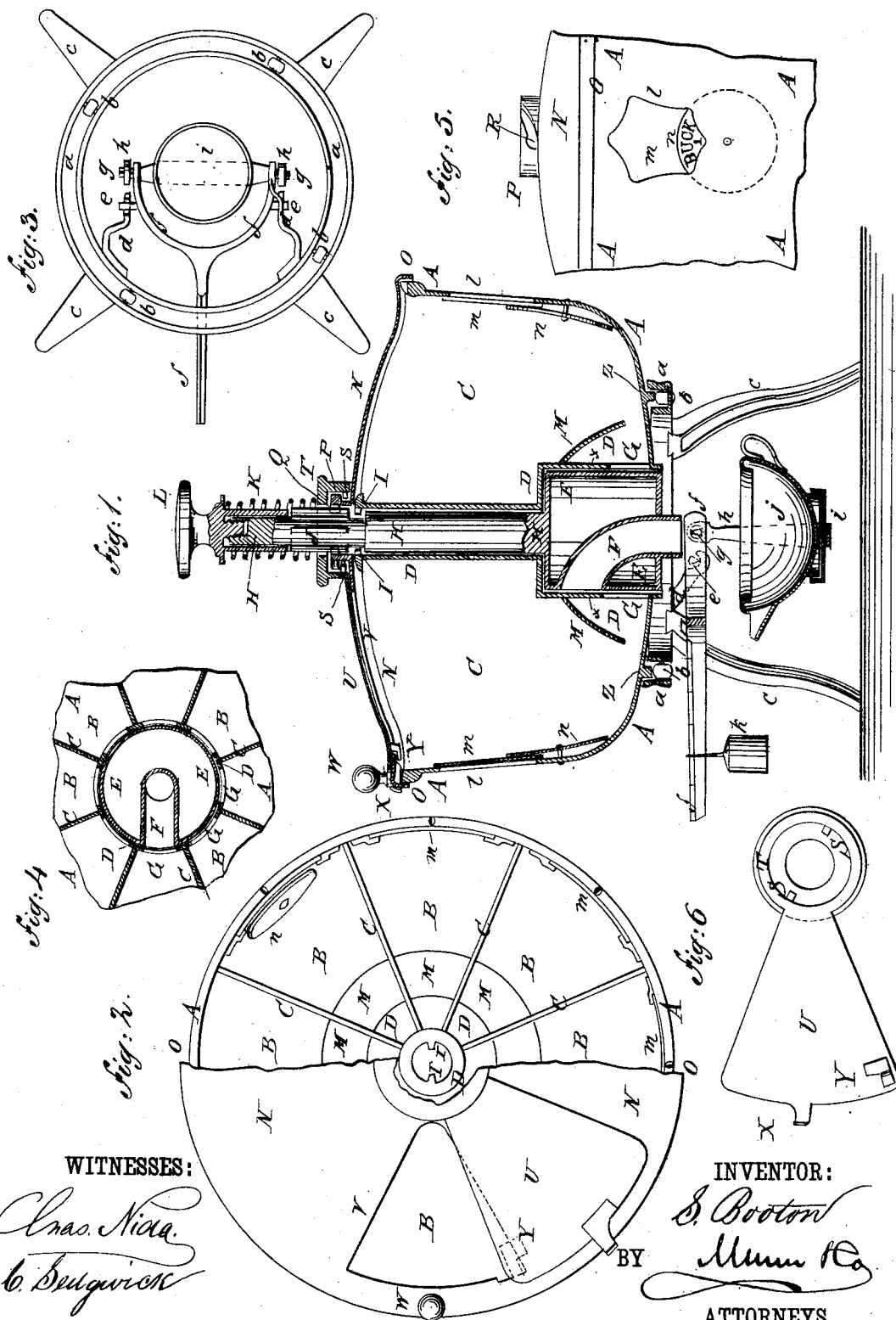
(No Model.)

S. BOOTON.

SHOT CASE AND DISTRIBUTER.

No. 244,537.

Patented July 19, 1881.



WITNESSES:

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SHOT CASE AND DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 244,537, dated July 19, 1881.

Application filed June 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, SINCLAIR BOOTON, of the city, county, and State of New York, have invented new and useful Improvements in Shot Cases and Distributers, of which the following is a specification.

Figure 1 is a sectional side elevation of my improvement. Fig. 2 is a plan view of the same, part of the top being removed. Fig. 3 is a plan view of the stand. Fig. 4 is a sectional plan view of the middle part of the improvement, taken through the line *x x*, Fig. 1. Fig. 5 is a side elevation of a portion of the case, showing the indicator-disk. Fig. 6 is a plan view of the top-opening cover.

Similar letters of reference indicate corresponding parts.

The object of this invention is to improve the construction of the shot cases and distributers for which Letters Patent No. 110,625 were issued to me January 3, 1871, in such a manner as to make it more convenient and reliable in use.

The invention consists in the combination, with the top of the case having an aperture and having inclined grooves in the sides of its collar and the discharge-tube stem, of the cover having inwardly-projecting pins in its collar, and the spring, whereby the said cover will be closed automatically; also, in the combination, with the radial partitions of the case and the central tube having discharge-apertures, of the shield, whereby the shot near the discharge-apertures will be relieved from the pressure of the mass of shot in the compartment, and can thus move back freely when struck by the rising discharge-tube; also, in the combination, with the case and its supporting-legs, of the flange attached to the case, and the grooved ring attached to the legs, whereby the case and distributer can be readily turned; also, in the combination, with the central tube having tongues, of the stem carrying the discharge-tube, and having grooves, whereby the said stem is kept from being pushed down in any other position than with the upper end of the discharge-passage of the discharge-tube opposite a discharge-aperture in the center tube of the case; also, in the combination, with the case having in its wall apertures provided with transparent plates, of

the pivoted disks having upon them the names or symbols of different kinds of shot, whereby the kind of shot in each compartment can be indicated; and, also, in the combination, with the rotating case having radial compartments each provided with a discharge-aperture leading into a central tube, and controlled by a rotating and sliding discharge-tube having a single discharge-passage, of a weighing-scale suspended beneath the case and within the stand, whereby the scale-pan is brought directly beneath and close to the single discharge-passage, as will be hereinafter fully described.

In the accompanying drawings, A represents a bowl-shaped vessel or case, which is divided into a number of compartments, B, by radial partitions C, extending from a vertical tube, D, secured in the center of the case A to the wall of the said case. The lower part of the tube D is made of a suitable size to receive the discharge-tube E, which has a curved discharge-passage, F, extending from an aperture in the side of the said tube E to an aperture in the center of its bottom, as shown in Fig. 1. In the lower part of the tube D, at the lower inner corner of each compartment B, is formed an aperture, G, corresponding in shape and size with the upper end of the passage F, so that shot can be withdrawn from any desired compartment B by bringing the upper end of the passage F opposite the discharge-aperture G of the said compartment. The upper part of the tube D is made smaller than the lower part, to receive, fit upon, and serve as a support and bearing for the rod H, formed upon or attached to the upper end of the discharge-tube E F. Upon the opposite sides of the upper end of the tube D are formed two inwardly-projecting lugs, feathers, or teeth, I, to enter vertical grooves J, formed in the rod H, or in a collar formed upon or attached to the said rod, the number of grooves J in the rod H being equal to the number of compartments B in the case, and being so arranged as to receive the feathers I only when the upper end of the passage F is directly above one of the discharge-apertures G, so that it will be impossible to lower the tube E with the upper end of the discharge-passage F in such a position as to receive shot from two adjacent discharge-apertures G.

The discharge-tube E and the rod or stem H are held up, holding the upper end of the passage F above the discharge-apertures G by a spiral spring, K, placed upon the upper end of the said rod or stem H, and the upper end of which rests against the shoulder of a thumb-screw, L, screwed into a screw-hole in the upper end of the said rod H. With this construction shot can be withdrawn from any desired compartment B by turning the rod H to bring the upper end of the passage F above the discharge-aperture G of the said compartment and then pressing the rod H and tube E downward to bring the said upper end of the passage F and the said discharge-aperture G into line with each other.

To the tube D and the partitions C within each compartment B, and directly over the discharge-passage G, is secured a shield, M, the lower edge of which does not reach quite to the bottom of the case A, as shown in Fig. 1, so that the shot in the said compartment will readily flow to and through the discharge-aperture G. With this construction the shield M relieves the shot adjacent to the discharge-aperture G from the downward pressure of the shot in the upper part of the said compartment, and leaves a vacant space below the upper part of the said shield, so that the shot partly within the said aperture can move back out of the way of the tube E, as the said tube is raised, and will thus be kept from being crushed or from choking the apparatus.

The top N rests upon the upper edge of the case A, and has a lip, O, formed along its outer edge to overlap the outer side of the said case A, as shown in Fig. 1. Through the center of the top N is formed an aperture in which is secured or formed a collar, P, to receive and fit upon the rod H.

To the collar P are attached or upon it are formed two or more lugs, feathers, or teeth, Q, to enter the grooves J of the rod H, so that the rod H and the discharge-tube E can be turned by turning the said top N.

In the outer surface of the opposite sides of the collar P are formed inclined or cam grooves R, to receive pins or lugs S, attached to or formed upon the inner surface of the collar T, which fits upon the collar P and is attached to the inner end of the cover U. The cover U is made of such a shape and size as to cover and close the opening V, formed in the top N, the said opening being preferably of the shape and size of one of the compartments B.

The opening in the top N is designed for convenience in supplying the compartments B with shot, and can be brought over one or another of the compartments B by turning the top N upon the case A. The opening V in the top N is designed to be arranged opposite the upper end of the passage F in the tube E, so that the cover N will serve as a guide in bringing the said passage F in line with the discharge-aperture G of the desired compartment B.

To the edge of the top N, opposite the center of the opening V, is attached a knob, W, for convenience in turning the said top.

The cover U is provided with a stop, X, to keep it down upon the top N, and a stop, Y, to keep it from being swung away from the opening V. The lower end of the spring K rests upon the top of the collar T, to which the cover U is attached. With this construction, when the cover U is swung back to uncover the opening V in the top N, the pins S and the inclined grooves R cause the collar T to rise upon the collar P, and the spring K, as soon as the cover U is released, forces the collar T down upon the collar P, and thus swings the cover U back into place to close the opening V in the top N.

To the bottom of the case A is attached or upon it is formed a ring-flange, Z, which rests in a groove in the ring-shaped top *a* of the stand, so that the case and distributor can be readily turned to bring any desired compartment B forward.

If desired, rollers *b* can be pivoted to the ring-top *a* at the bottom of its groove for the flange Z to rest upon, to diminish the friction as the case and distributor is turned.

To the ring-top *a* are attached or upon it are formed legs *c*, of such a length as to raise the case and distributor to a convenient height.

To the ring top *a* of the stand are rigidly attached or upon it are formed inwardly-projecting arms *d*, in the inner ends of which are formed sockets or eyes to receive the knife-edged pivots *e*, formed upon or attached to the arms or branches of the forked inner end of the balanced beam *f*, at a little distance from the ends of the said arms or branches.

To the ends of the arms or branches of the beam *f* are attached or upon them are formed knife-edged pivots *g*, to enter eyes formed in the ends of the arms *h* of the plate *i* that receives and supports the scale-pan *j*.

The beam *f* is provided with a scale of division-marks and a pea or adjustable weight, *k*, so that the shot can be weighed as they flow into the scale-pan *j*. With this construction the scale-pan *j* will be directly beneath the center of the discharge-tube E, and will be close to the lower end of the passage F when the said tube E is lowered to withdraw shot from one of the compartments B, so that the shot will have only a short distance to travel in passing from a compartment, B, to the scale-pan *j*, and the weighing can be done very accurately, as there will be very few shot in the passage F when the beam trips and the tube E is raised.

In the wall of the case A, opposite each compartment B, are formed apertures *l*, which are closed by plates *m* of mica, glass, or other suitable transparent material.

To the wall of the case A, below the apertures *l*, are pivoted disks or circular plates *n* of metal or other suitable material, which have around their edges the names or symbols of

the various kinds of shot made or required in the locality where the case and distributor are to be used.

5 The disks *n* are made of such a size that one of the names or symbols can be seen through the aperture *l* of the compartment in which the disk is placed. With this construction, before shot are poured into a compartment, B, the disk *n* of that compartment is adjusted to
10 display the name or symbol of the particular kind or size of shot to be placed in the said compartment, so that any one can tell what kind of shot is in each compartment without opening the various compartments to find the
15 desired kind of shot. The top N and tube E can then be adjusted, and the desired kind of shot weighed out.

Having thus fully described my invention, I claim as new and desire to secure by Letters
20 Patent—

1. In a shot case and distributor, the combination, with the top N, having an aperture, V, and having inclined grooves R in the sides of its collar P, and the discharge-tube stem H,
25 of the cover U, having pins S in its collar T, and the spring K, substantially as herein shown and described, whereby the said cover will be closed automatically, as set forth.

2. In a shot case and distributor, the combination, with the radial partitions C, of the case A and the central tube, D, having discharge-apertures G, of the shields M, substantially as herein shown and described, whereby the shot near the discharge-apertures will be
30 relieved from the pressure of the mass of shot in the compartments, and can move back freely when struck by the rising discharge-tube, as set forth.

3. In a shot case and distributor, the combination, with the case A and the legs *c*, of the flange Z and the grooved ring *a*, substantially as herein shown and described, whereby the case and distributor can be readily turned, as set forth.

4. In a shot case and distributor, the combination, with the central tube, D, having
45 tongues I, of the stem H, carrying discharge-tube E F, and having grooves J, substantially as herein shown and described, whereby the said stem is kept from being pushed down in
50 any other position than with the upper end of the passage F opposite a discharge-aperture in the center tube, D, as set forth.

5. In a shot case and distributor, the combination, with the case A, having apertures *l*,
55 provided with transparent plates *m*, of the pivoted disks *n*, having upon them the names or symbols of different kinds of shot, substantially as herein shown and described, whereby the kind of shot in each compartment can be indicated, as set forth.

6. In a shot case and distributor, the combination, with the rotating case A, having radial compartments B, each provided with a discharge-aperture leading into a central tube
65 and controlled by a rotating and sliding discharge-tube having a single discharge-passage, of a weighing-scale suspended beneath the case and within the stand, substantially as herein shown and described, whereby the scale-
70 pan is brought directly beneath and close to the single discharge-passage, at set forth.

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Witnesses:

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