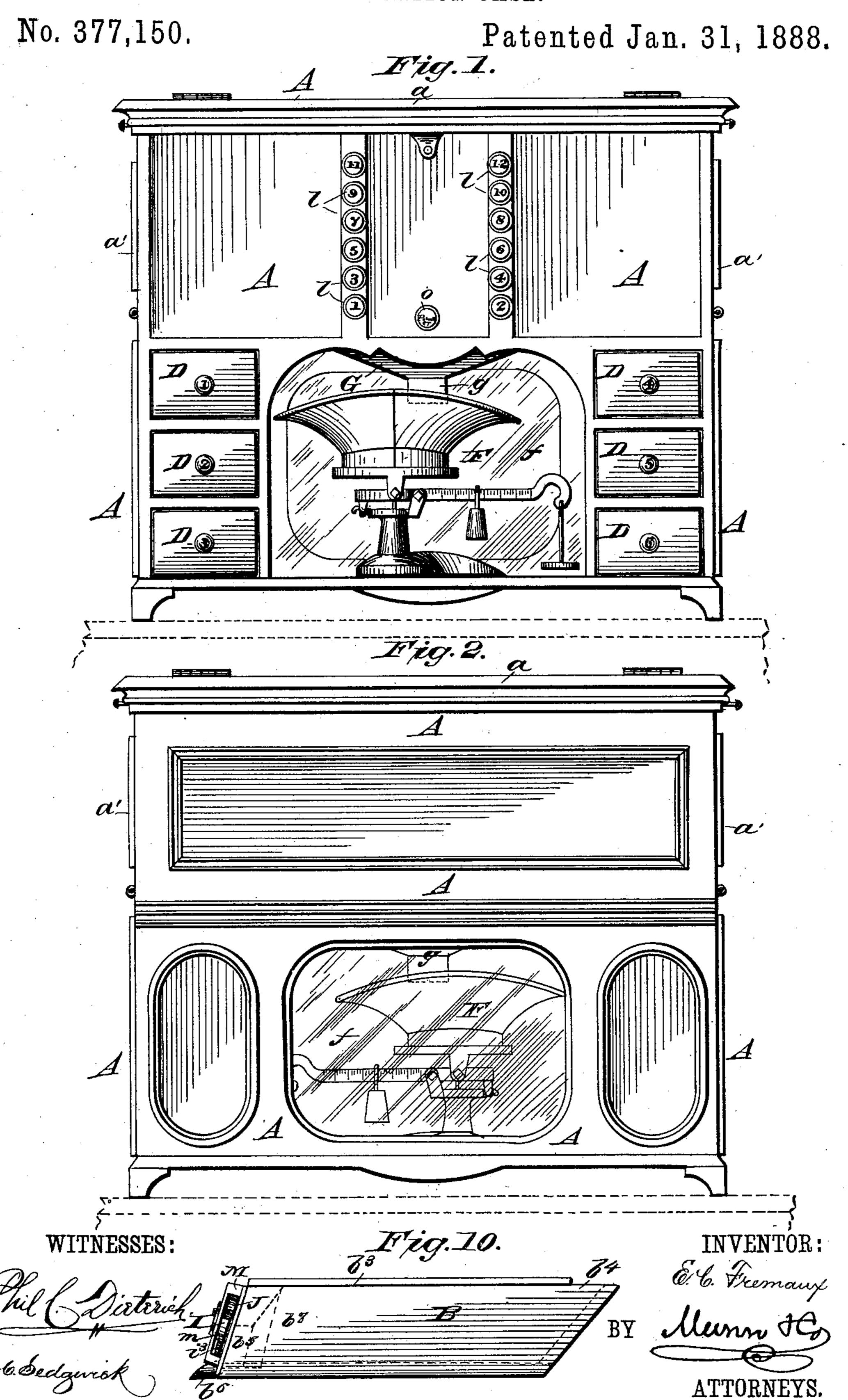
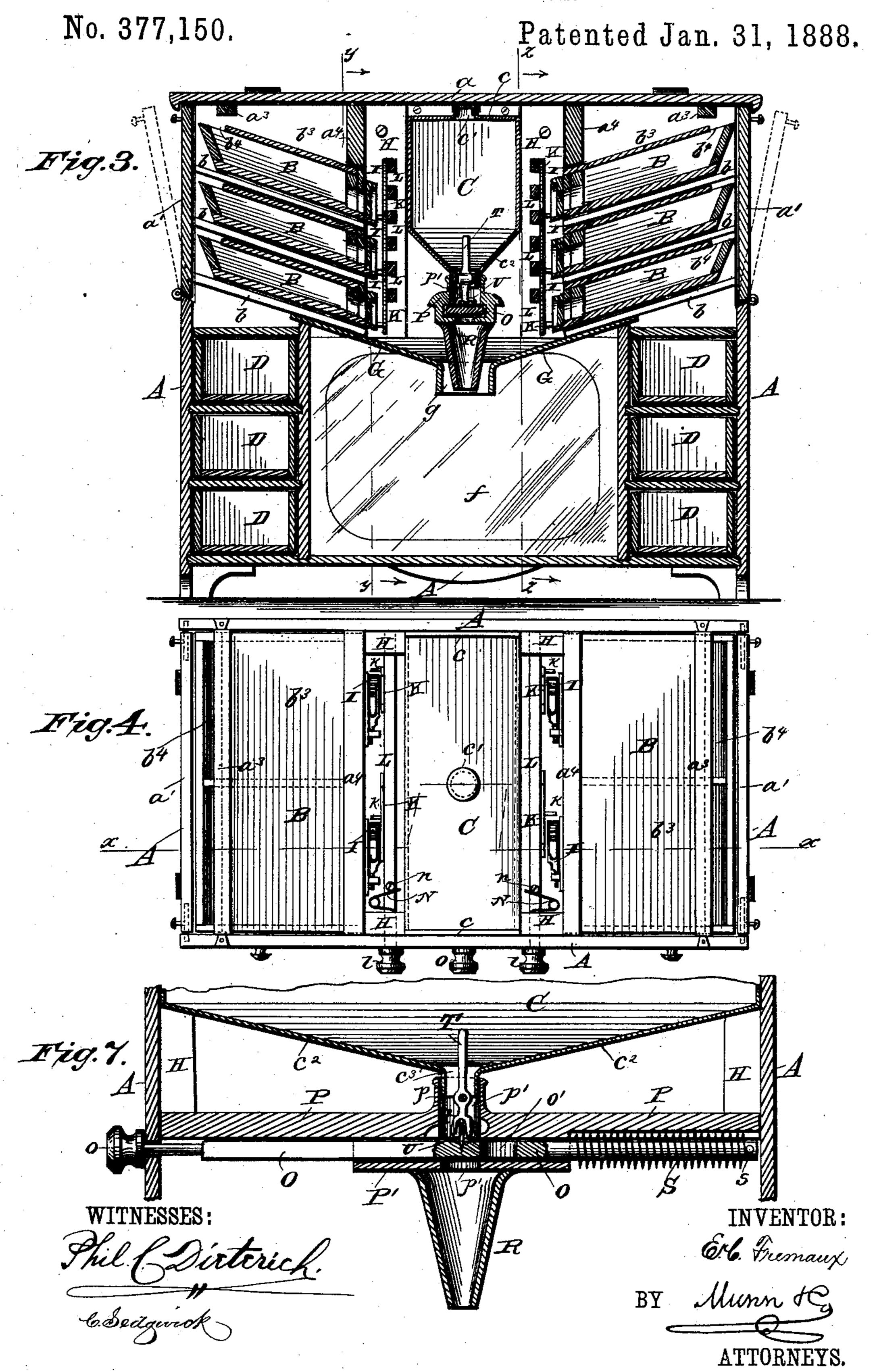
### E. C. FREMAUX.

AMMUNITION CASE.



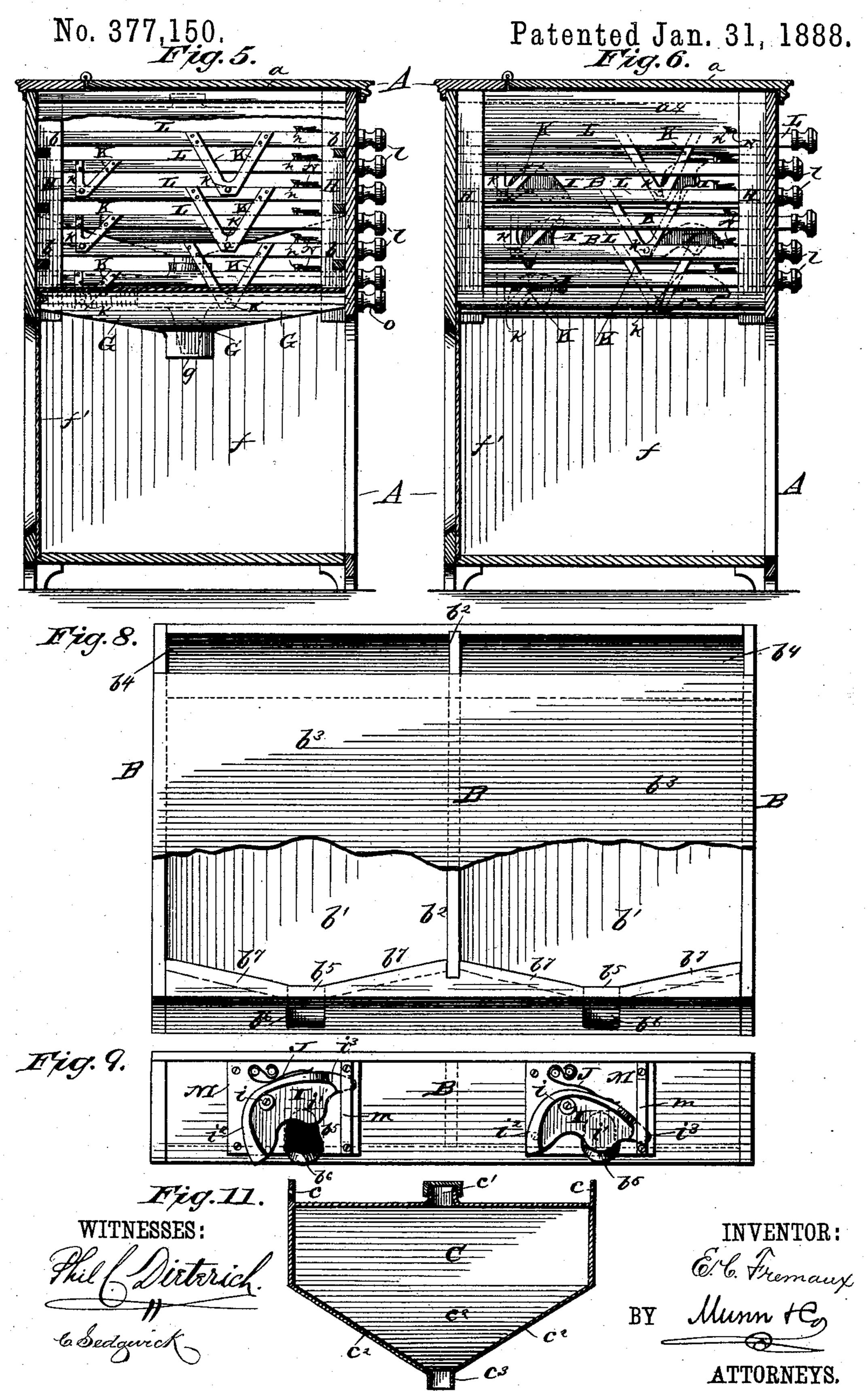
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# United States Patent Office.

EDWARD CHARLES FREMAUX, OF MERMENTAU, LOUISIANA.

#### AMMUNITION-CASE.

SPECIFICATION forming part of Letters Patent No. 377,150, dated January 31, 1888.

Application filed September 21, 1887. Serial No. 250,302. (No model.)

To all whom it may concern:

Be it known that I, EDWARD CHARLES FRE-MAUX, of Mermentau, in the parish of Acadia and State of Louisiana, have invented a new and Improved Ammunition Case, of which the following is a full, clear, and exact description.

My invention relates to a case to be set on a counter for the use of store-keepers and others in retailing shot, powder, and gun materials; and the invention has for its object to provide a simple, comparatively inexpensive, and conveniently-arranged case of this charater.

The invention consists in certain novel features of construction and combinations of parts of the ammunition case, all as herein after described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters and figures of reference indicate corresponding parts in the several

views. Figure 1 is a front view of the ammunitioncase or of its side next the store-keeper. Fig. 2 25 is a view of the reverse side of the case, or that next the customer. Fig. 3 is a vertical longitudinal section taken on the irregular line x x, Fig. 4. Fig. 4 is a plan view of the case with its cover removed. Fig. 5 is a 30 vertical transverse sectional view taken on the line y y, Fig. 3. Fig. 6 is a like view taken on the line zz, Fig. 3. Fig. 7 is an enlarged detail vertical transverse section through parts of the case-frame, the powder-box, and the 35 powder-discharge valve. Fig. 8 is a plan view of one of the shot-drawers with its top partly broken away and drawn to a larger scale. Fig. 9 is a front view of the shot-drawer. Fig. 10 is a side view of the drawer, and Fig. 11 is 40 a central vertical section of the powder-box.

The ammunition case is made with a box or casing, A, which holds the receptacles containing shot, powder, and gun materials, and the weighing scales used in retailing the powder and shot, as hereinafter fully explained.

The upper part or half of the box A contains the shot trays or drawers B, which are arranged preferably three at each end of the box, and at opposite sides of an upper central compartment in which the powder box or holder C is supported; and below the trays B at each end of the box A are arranged a

series of drawers, D, preferably three at each end of the box, and which open at the front or store-keeper's side of the ammunition-case, and 55 are intended as receptacles for buckshot, cartridges, primers, caps, screws, or other gun materials, which thus may be kept separate and conveniently at hand when called for. Between the two side pillars or legs of the case 60 in which the drawers D are fitted, and below the powder-holder C, a space or chamber, f, is provided to receive a weighing-scales, F, the scoop of which is immediately under the mouth g of a hopper or chute, G, which is secured 65 beneath the powder-holder C, and forms a common outlet to the scales for both powder and shot, as presently explained.

The chamber f is open at the front of the case next the store-keeper, to give him ready 7c access to the scales; but at its opposite side, next the customer, the chamber is closed by a glass plate, f', which, while giving the customer full view of the weighing operation, effectually prevents passage of sparks from lighted cigars 75 to the powder being weighed and in the holder, and promotes safety against fire, so liable to occur at times when powder is openly weighed without such safeguards in the presence of careless persons.

The box or easing A has a hinged top portion, a, which may be opened to give access to the powder-holder C for refilling or removing it as required, and the upper part of each end of the box is formed as a door, a', which 85 is hinged preferably at its lower edge, and may be opened to give access to the shot-trays B for refilling or removing them as occasion requires. The doors a a' have suitable latch or bolt fastenings. As the peculiar arrange- 90 ment of the shot trays B and the adjacent door a' at each end of the box A is disposed to weaken the box at these places, I tie the front and rear sides of the box together near each end by a cross-bar, a<sup>3</sup>, which interlocks by dovetailed 95 joints (see Fig. 4) with the sides and securely braces them both ways; and for additional braces to the opposite sides of the box I employ two quite heavy cross bars, at at, which are secured to the box-sides and also to four 100 substantial upright bars, H H H H, which are screwed or otherwise fastened to the sides of the box at the four corners of the central upper compartment in which the powder-holder

C is supported. The cross-bars  $a^4$  range directly over or above the inner sides or fronts of the top shot-trays, B B, at each end of the case, and hold said trays down to proper position onto their guide cleats or ways b, which are fixed to the opposite sides of the box A. Each tray B is supported on opposite cleats b b, which incline downward toward the middle of the ammunition-case to cause the shot to flow from them when the tray-valves are opened, in a manner presently explained.

I particularly describe the shot-trays B as follows: The trays being alike, a description of one will suffice for all of them. Each shot-15 tray is made with side walls, to which is fixed a bottom, b', and a partition,  $b^2$ , divides the tray into two compartments adapted to receive shot of different sizes. The inner or front wall of the tray is inclined sufficiently to stand ver-20 tical when the tray is supported on its inclined cleats b, and stops against the opposite side bars, H H, in the box A, and the rear side of the tray nearest the box-door a' is inclined considerably to facilitate inflow of the shot to 25 the tray when the trays are refilled or recharged while in the box when the door a' is opened. The top  $b^3$  of the tray covers all of it except a small portion next its outer or back wall, thus providing opening  $b^4$ , through which 30 the shot are poured into the tray. The front wall of the tray is provided with a couple of discharge openings,  $b^5$   $b^5$ , one for each compartment of the tray, and a projecting lip or short spout,  $b^6$ , is provided beneath each out-35 let  $b^5$ , which is made in the center of the compartment, and toward which the front wall of the tray is inclined or beveled each way at  $b^7$  $b^7$  at its inner face to assure automatic discharge of all the shot by gravity from each

40 compartment of the tray. At each of its discharge openings the tray is provided with a valve, which consists of a metal plate, I, which has a general right-angular form, and is pivoted at i to the front of the 45 tray, so that a rounded-lip portion, i', of the plate is adapted to fit over the tray-opening  $b^5$ and closely upon or within the spout be at said opening. A spring, J, held to the tray acts normally on the top of the valve I to close it, 50 and each valve is opened, as may be required, by contact with its short arm or end i of a pin, k, which is fixed to a bracket or arm, K, attached to a pull-rod, L, which is fitted to slide in mortises made in the box-uprights H, 55 and as hereinafter more fully explained. prefer to pivot the valve I and attach the spring J to a metal plate, M, which is screwed to the front of the tray and has a hole registering with the tray-opening  $b^5$ , and is also provided 60 with a cross-bar or bridge-piece, m, between which and the body of the plate the tail end  $i^3$ of the valve I is held and guided to assure proper working of the valve.

Each of the valve operating rods L is thrown back to normal position when its pull-knob l outside the case is released by a spring, N, one end of which is fixed to the front side or wall

of the box A, and its other end presses backward on a pin, n, which is fixed to the pull-rod L, and which serves also as a stop to prevent 70 withdrawal of the rod from the case. The retraction of the pull-rod by its spring N allows the spring J of the valve which had been opened by the rod-pin k to instantly close the valve to cut off the flow of shot from one compartment 75 of one of the trays B.

As the trays are arranged three at each end of the ammunition case, and as each tray has two compartments, there are twelve compartments in the six trays for as many different 80 sizes of shot. As two pull-rods, L L, are required to operate the two valves I I of each tray, the arm K, having a pin, k, which actuates one of these two valves, is made about twice as long as the arm K, which actuates 85 the other of the two valves, there being six. pull-rods, L, arranged in a vertical row at each side of the powder-holder C, or immediately in front of the trays next their valves, all as will be understood from Figs. 1, 3, 5, and 6 of the 90 drawings. I number the pull-rod knobs l and mark like numbers on the compartments of the trays whose valves connect with the respective pull-rods, and I will also number the side walls of the box A opposite each of the trays 95 in like manner. The preferred system of numbering the knobs lis to mark the left-hand row of knobs in odd numbers, ranging upward from 1 to 11, inclusive, and to mark the right-hand row of knobs in even numbers from 2 to 12, inclu-100 sive, as shown in Fig. 1 of the drawings. Shot are usually numbered from 1 upward, and the size and weight of the shot decrease relatively with the higher numbers by which they are designated. Hence I place the heavier shot 105 in the lowermost trays, from which they fall the lesser distance when the tray-valves are opened, and mark the pull-rod knobs and trays accordingly. By numbering the box A opposite the trays, their proper replacement in the 110 box is assured; and I here remark that the springs N of the pull-rods, by forcing said rods inward, assure proper positions of the valveoperating pinsk behind the valves I whenever the trays are replaced in the case after being 115 removed for any purpose.

The powder-holder C is fitted in the space between the box-uprights H and the sides of the box, and preferably has the rectangular general form shown, and is provided with up- 120 wardly-projecting end flanges, c c, through which screws are passed to support the holder from the side walls of the box A, and at its top the holder has an opening closed by a cap, c', to allow filling it, and the holding-bottom  $c^2$  is 125 inclined from all sides, or hopper-shaped, for free discharge of the powder when the valve O of the holder is opened. At its lower discharge opening the hopper is preferably provided with a neck,  $c^3$ , which fits into a flange, p, 130 formed around a discharge-opening, p', made in a cross-bar, P, which extends across the box A and is secured to its opposite sides. The valve O is a plate, which is fitted in a longi377,150

tudinal slot made in a thickened part, P', of the cross-bar P, and is provided with a hole, o', which, when moved to register with the hole p' of plate P, allows passage of powder through 5 a spout, R, fixed to the cross-bar, to the scoop of the weighing scales. The spout R passes down into or through the spout g of the shot hopper or chute G, and is smaller than said spout g, so as not to interrupt the passage of 10 shot therethrough to the scales, and also to assure free passage of powder through said inner spout R, as occasion requires. The stem of the valve projects through the front of the case, and carries a pull-knob, o, to allow it to be 15 drawn out against the tension of a spring, S, which is placed on the back end of the valvestem between a shoulder on the cross-bar P and a pin, s, fixed in the stem. The spring S instantly closes the valve O to cut off escape 20 of powder to the scales when the knob o is released. It will be noticed that the powdervalve O is entirely relieved of the weight of the powder-holder.

To prevent a caking or choking up of the 25 powder at the outlet  $c^3$  of the holder C, I pivot in the flange p of the cross-bar P a finger or agitator, T, the lower end, t, of which is forked and straddles a cross-bar, pin, or staple, U, fixed in the top of the valve O, and whereby, 30 as the valve is pulled outward by its knob o and retracted by the spring S, the upper end of the agitator will be vibrated in the outlet of the powder holder to break up any lumps or caked masses of powder and cause its free 35 discharge the instant the valve is opened.

It is obvious that the above described ammunition case may be made either plain or ornamental, as regards its outside finish, to match the other fittings of the store, on a counter of 40 which it will be set up for use, and the case may be made of any required size, with any desired number of shot-trays, as will readily be understood.

Having thus described my invention, what 45 I claim as new, and desire to secure by Let-

ters Patent, is—

1. An ammunition case constructed with a box, one or more shot-trays fitted therein, a hopper below the trays and provided with an 50 outlet for discharge of shot dropped from the trays, and a powder holder supported in the box and having an outlet discharging at or through the shot-hopper outlet, substantially as shown and described, whereby the shot and 55 powder may be discharged at the same point to the scoop of a subjacent weighing-scales, as herein set forth.

2. An ammunition case constructed with a box, one or more shot-trays fitted at each end 60 of the box, a hopper below the trays and provided with an outlet for shot, a powder holder supported in the box between the trays and arranged to discharge at or through the shot-hopper outlet, and said box being fitted with gun-65 material drawers arranged below the trays, and providing a space to receive a weighing-scales, substantially as herein set forth.

3. An ammunition-case constructed with a box, one or more shot-trays fitted in the box, a powder-holder arranged next the trays, a 70 hopper below the trays and provided with an outlet for shot, and said powder-holder discharging at the shot-outlet, and valves fitted at discharge openings of the shot trays and powder-holder and connected to pull-rods ex- 75 tending outside the box, substantially as herein set forth.

4. In an ammunition case, the combination, with a box, A, of one or more shot-trays fitted therein and having a discharge-opening,  $b^5$ , a 80 pivoted automatically-closing valve, I, fitted over said opening, and a rod, L, extended to the outside of the box and provided with a pin which opens the valve when the rod is operated, substantially as herein set forth.

5. In an ammunition case, the combination, with a box, A, having one or more shot-trays provided with an outlet,  $b^5$ , of a pivoted valve, I, fitted over said opening, a rod, L, provided with a pin, k, adapted to open the valve when 90 the rod is operated, and a spring, N, retracting the rod, substantially as described, for the purposes set forth.

6. In an ammunition-case, the shot-tray made with an opening,  $b^4$ , at the rear, a discharge- 95 opening,  $b^5$ , at the front, which inclines toward said opening, and a spring-pressed valve, I, normally closing said opening, substantially as herein set forth.

7. In an ammunition case, the shot-tray made 100 with a front outlet,  $b^5$ , to which the front wall of the tray inclines, and a valve, I, pivoted to the tray and adapted to close the outlet b, substantially as herein set forth.

8. In an ammunition-case, the shot-tray made 105 with two compartments, each having an outlet,  $b^5$ , to which the front wall of the tray inclines, and spring-pressed valves I I, pivoted to the tray and adapted to close the outlets of the compartment, substantially as herein set forth. 110

9. The shot-tray valve consisting of an apertured plate, M, fixed to the tray, and having a bridge-piece, m, a valve, I, pivoted at i to the plate M and entered at i3 beneath the bridge m, and a spring, J, held to the plate M, sub- 115 stantially as herein set forth.

10. In an ammunition case, the combination, with the box A, of a cross-bar, P, fixed thereto and provided with an opening, p', registering with the outlet of a superposed powder-holder, 120 a valve, O, fitted to the cross-bar P, and a spout, R, fixed to the cross-bar, substantially as described, for the purposes set forth.

11. In an ammunition - case, the powderholder fitted at its outlet with an oscillatory 125 agitator, T, in combination with a staple or pin on the powder-valve actuating the agitator when the valve is operated, substantially as shown and described.

EDWARD CHARLES FREMAUX.

Witnesses: D. B. HAYES, M. J. Andrus.