

(No Model.)

C. W. OSGOOD.

Cartridge Loaders.

No. 235,699.

Patented Dec. 21, 1880.

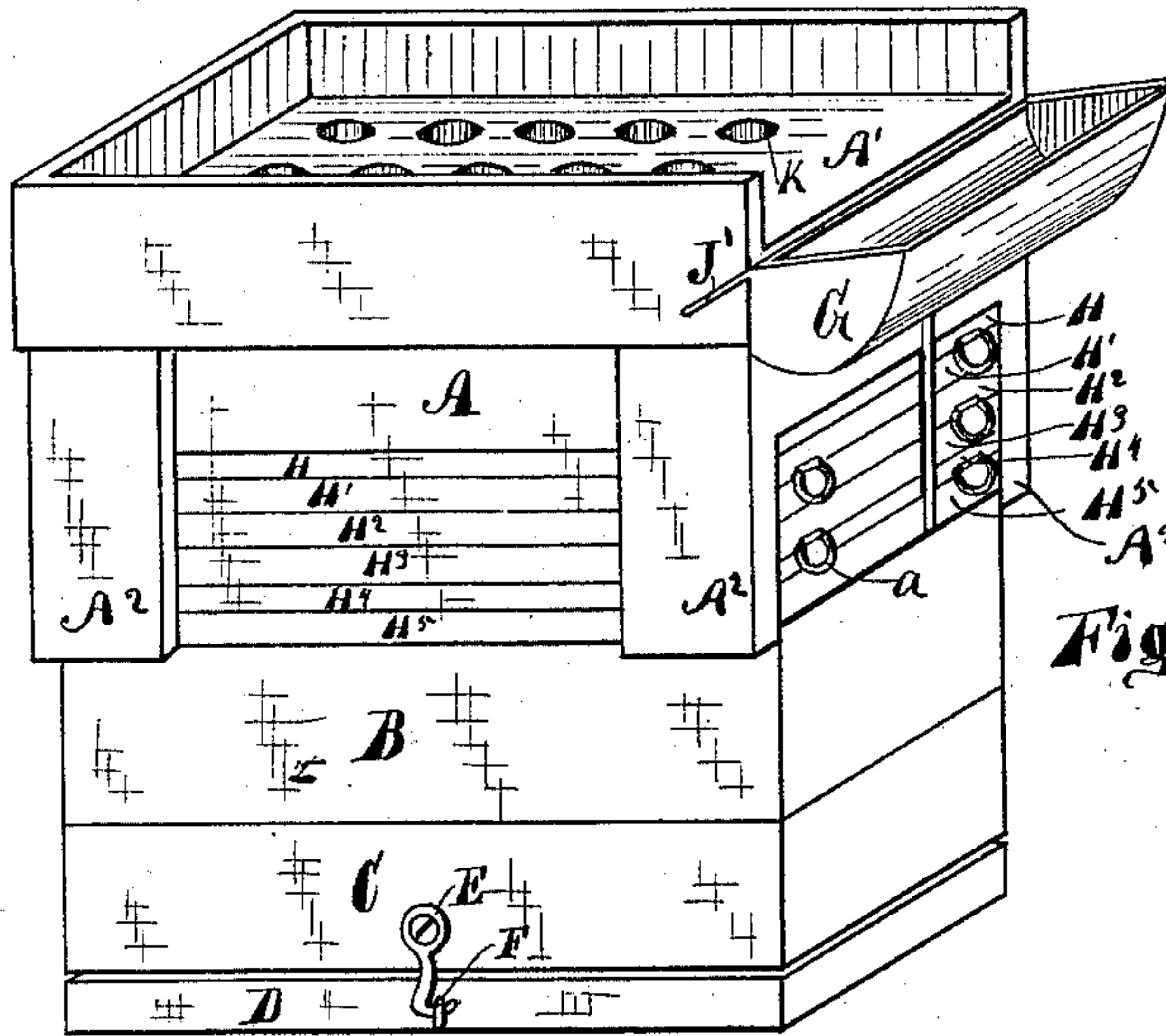


Fig. 1.

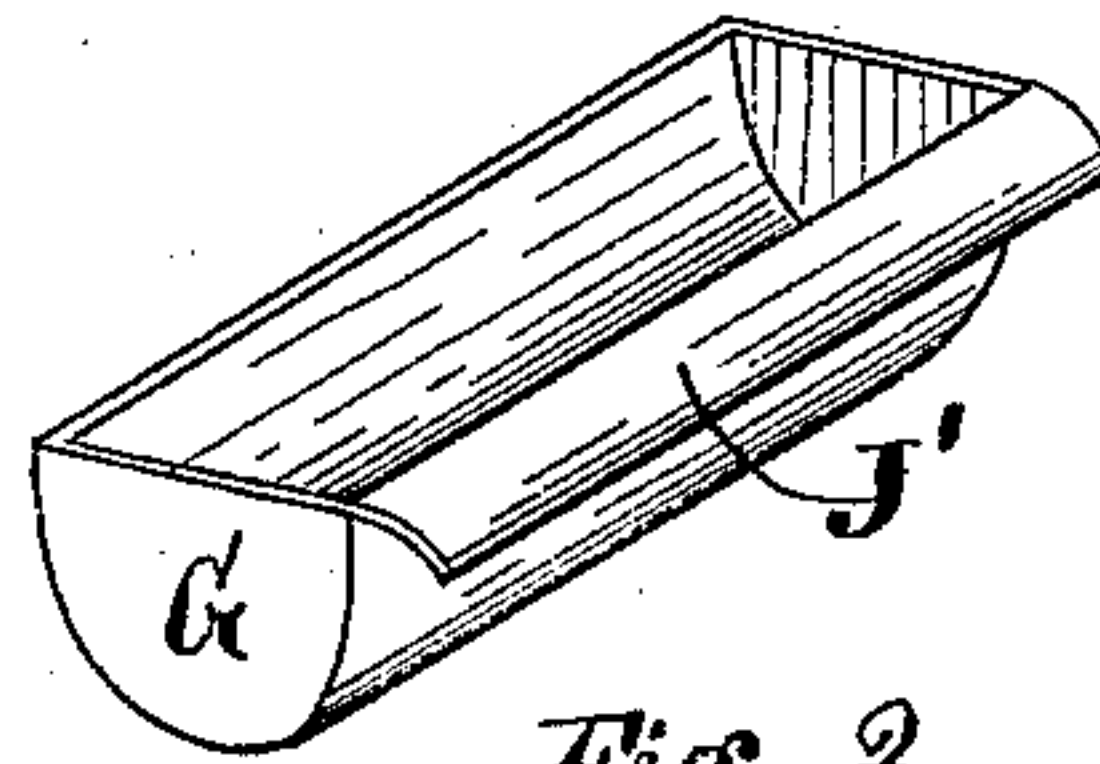


Fig. 3.

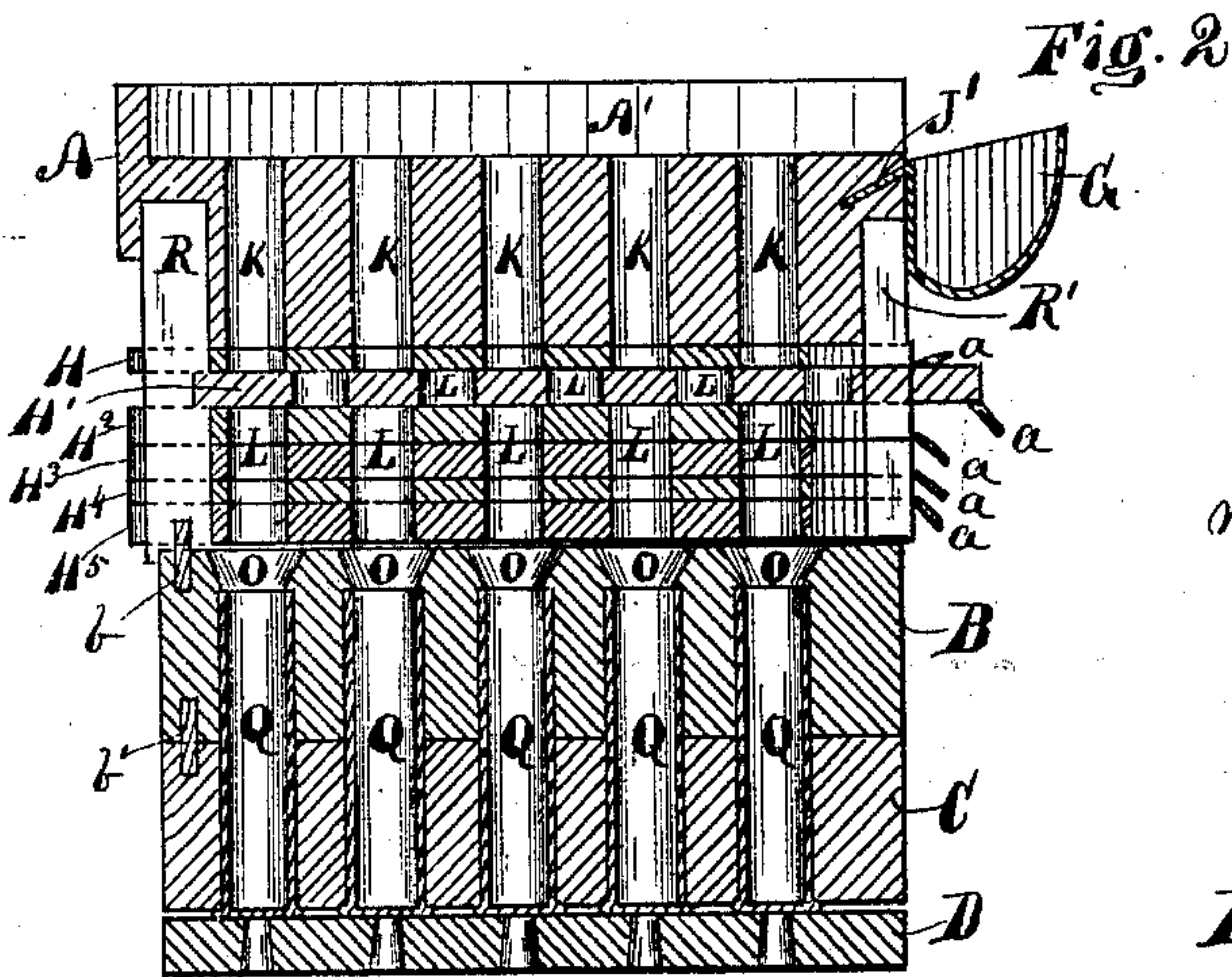


Fig. 2.

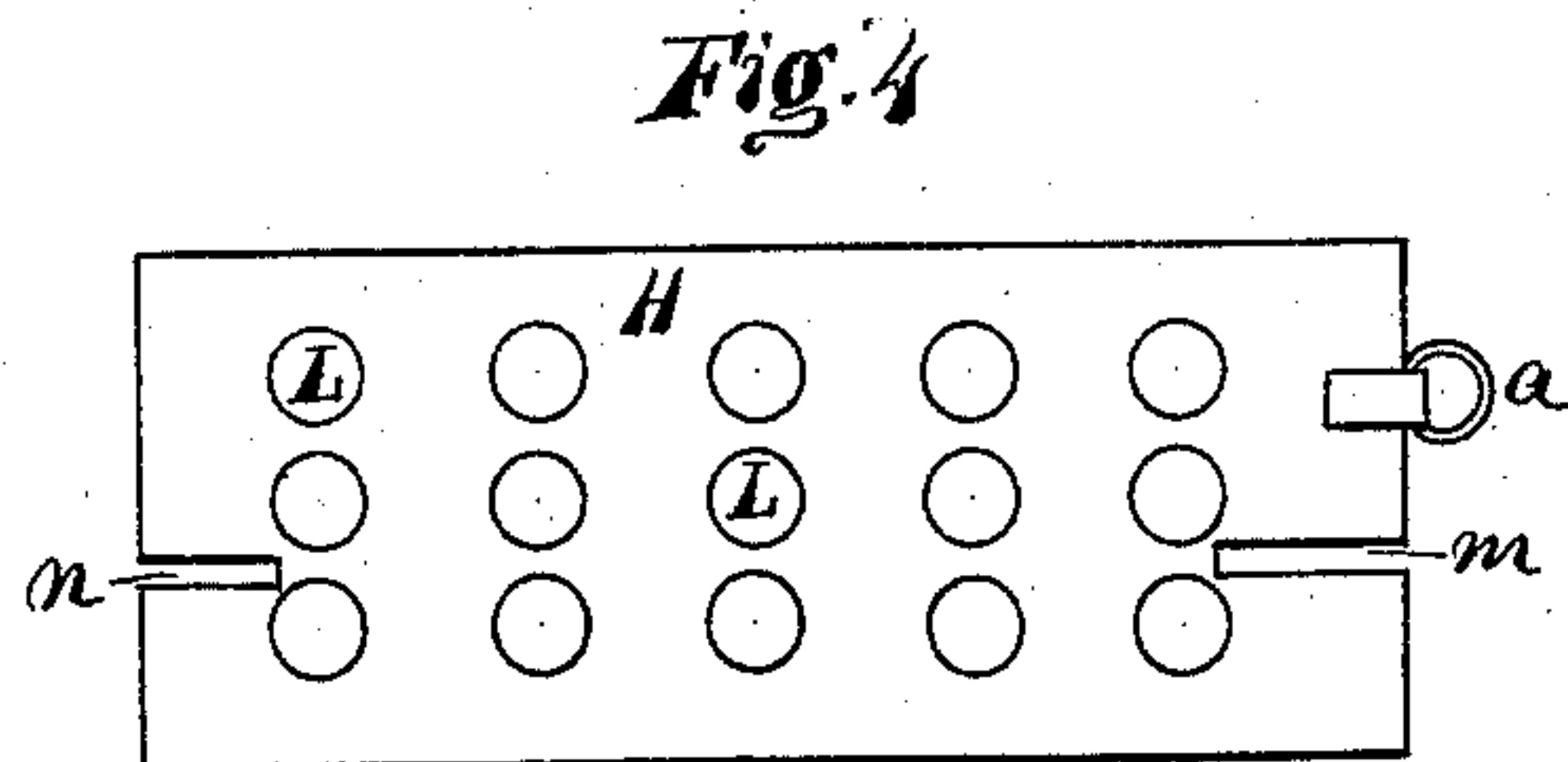


Fig. 4.

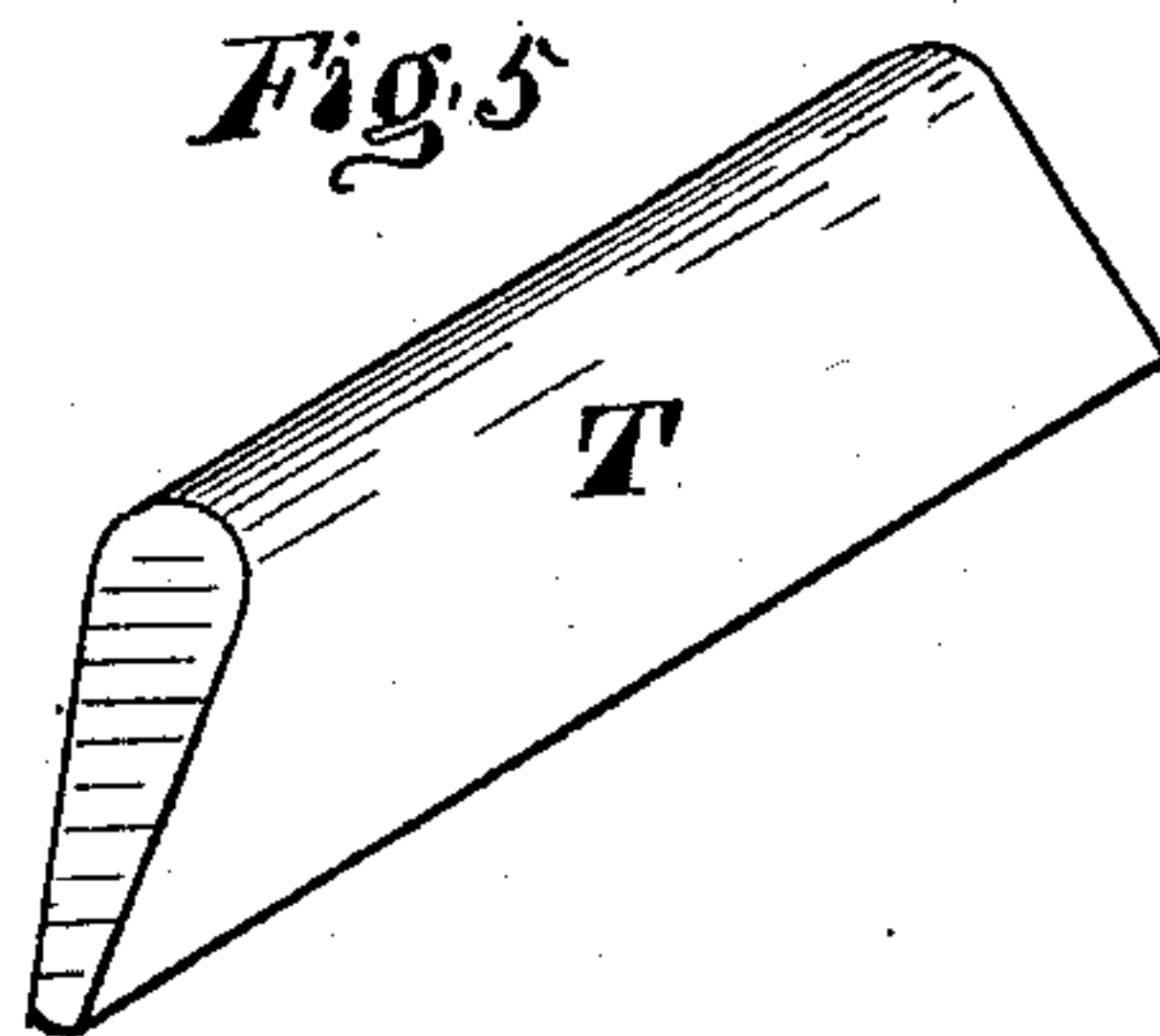


Fig. 5.

Witnesses;
Zelora Phillips
G. H. Remmett.

Inventor.
Charles W. Osgood,
Per E. H. Smith
his attorney

UNITED STATES PATENT OFFICE.

CHARLES W. OSGOOD, OF INDIANAPOLIS, INDIANA.

CARTRIDGE-LOADER.

SPECIFICATION forming part of Letters Patent No. 235,699, dated December 21, 1880.

Application filed May 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. OSGOOD, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Cartridge-Loaders, of which the following is a specification.

My invention relates to improvements in cartridge-loaders, in which a series of perforated horizontal adjustable slides or plates operate in conjunction with a charger and cartridge-shell holder and a detachable surplus powder and shot trough operates in connection with the charger-block; and the objects of my invention are, first, to provide a cartridge-charger with a detachable trough for catching and removing the surplus powder or shot from the charging-trough after the charging-holes have been filled; second, to provide the charger with a series of adjustable sliding perforated plates or slides for the purpose of regulating and gaging the quantity of powder or shot required in the shells by increasing or diminishing the depth of the charging-holes. These objects I attain by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of the entire machine. Fig. 2 is a longitudinal vertical section through the center of one row of cartridge-shells and charging-orifices, showing one slide drawn out to form the bottoms of the charging-holes. Fig. 3 is a perspective view of the detachable trough removed from the charger-block. Fig. 4 is a plan view of one of the perforated bottoms or adjustable slides; and Fig. 5 is a perspective of the scraper used for removing the surplus powder or shot from the charger-trough.

Like letters refer to like parts throughout the various views.

A represents the charging-block, which is provided with a series of vertical holes, K, adapted to receive charges of powder and shot. The vertical length of these holes is designed to be sufficient to hold the smallest charges of powder or shot required for loading a shell. The upper portion of the block A is provided with sides and one end, forming a trough, A', into which the powder and shot are respectively poured while filling the charging-holes K. At each side of the block A, near each

corner, are attached the downward-projecting sides A² A², and between these sides the stationary perforated bottom H⁵ is secured.

The space between the perforated bottom H⁵ and the bottom of the charger-block A is filled with a series of adjustable slides or plates, H H' H² H³ H⁴, of various thicknesses, all of which, as well as the bottom H⁵, are perforated with holes L and provided with slots n m, as shown in Fig. 4, and the slides are each provided with a ring or projection, a, to take hold of when they are drawn out. The perforations in all the slides H H' H² H³ H⁴, the bottom H⁵, and charger-block A are alike—that is, when all the slides are closed, as in Fig. 1, the holes K and L extend through from the trough A' to their respective cartridge-shell holes below.

The vertical bars R R' are secured to the ends of the charger-block A and bottom H⁵ in the slots n and m of the adjustable slides H H' H² H³ H⁴, and form stops. Thus when the slides H H' H² H³ H⁴ are shoved in, the bar R stops all of them, so that all the holes L in the slides will be in line one above the other, also in line with the holes K of the charging-block A and the holes in the bottom H⁵; but when any one of the slides, as H², is drawn forward, then the bar R' stops it at the proper place to cause the solid parts of the slide between the holes L to form bottoms to all the charging-holes K in the block A.

It will be observed that the quantity of powder or shot may be increased or diminished at pleasure, according to the slide drawn out. Thus, if the slide H³ is drawn out and the rest of the slides closed, the vertical length of the charging-holes is increased by the holes L in the slides H², H', and H above; and if the slide H is drawn out, the length of the holes K is reduced.

The front end of the charging-block A is provided with an inclined groove or slit, J, which is cut across the end just below the bottom of the trough A', in which the inclined rib or flange J' of the trough G is inserted, and the trough is supported until removed for emptying out any surplus powder or shot that may be scraped into it while cleaning out the trough A' after the charging-holes K have been filled.

The lower ends of the projecting sides A²

project a short distance below the bottom H^5 , to receive and hold the guiding-block B and prevent lateral motion. All end motion is prevented by the pin b , which is made fast in the bottom H^5 and inserted in a corresponding hole formed in the upper part of the block B, as shown in Fig. 2.

The cartridge-shell-holding blocks B and C are also secured together by dowel-pins b' , and the lower block, D, is hinged to one of the lower sides of the block C and held in place by the hook E and staple F.

The wooden scraper T, Fig. 5, is constructed similar to that shown, and is used to scrape out any surplus powder or shot from the trough A' into the removable trough G. The detachable or removable trough G is made of any suitable material, with a form similar to that shown, and is provided with a rib or flange, J' , to fit in the slit J, as shown in Figs. 1 and 2.

The operation of my improvement is as follows, to wit: The empty cartridge-shells Q are inserted in their respective holes formed in the blocks B C, and the block D made fast by the hook E and staple F in the same manner as in J. H. Murry's Patent, No. 221,971, November 25, 1879. The charging-block A is then placed on top, as shown in Figs. 1 and 2. If the holes K of the block A require the additional length of the holes L in the slide H to give the required charge, then the slide H' below is drawn out, shutting off the holes K below the holes L in the slide H. The powder is then poured into each hole K until all of said holes are filled, after which the surplus powder is scraped into the trough G, the trough G removed, and the powder contained therein is poured into its proper receptacle, after which the slide H^2 is shoved in, thus bringing its holes L in line with the holes K and L above, thus causing the several charges of powder to fall into their respective shells Q below. The charging-block A is then removed and the wads inserted in the beveled holes O above the cartridges and forced home. The charger-block A is then replaced, and any one of the slides $H H' H^2 H^3 H^4$ that will give the desired charge of shot is drawn out, forming a bot-

tom to the charging-holes K. The shot is then poured in the holes K and the surplus shot removed, the same as the powder, after which the slide drawn out is closed in and the shot deposited in each respective shell. The charger-block A is again removed, the last wads inserted and drawn home, as before described, after which the shells are crimped, removed, and empty shells inserted in the blocks C B, and the operation is repeated.

I am aware that prior to my invention cartridge-loaders have been constructed having sliding chargers both loose and hinged; also, that a sliding charger with a permanently-attached surplus powder and shot trough have been made; also, that chargers have been made in which several loose removable perforated plates have been employed in the charging-trough to increase or diminish the quantity of the charges; also, that a cartridge loader, crimper, and cap-extractor, somewhat similar in several parts to that shown in connection with my improvement, was patented by J. H. Murry November 25, 1879, No. 221,971. I therefore do not claim such combinations broadly; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In combination with a cartridge-charger, A, a series of adjustable perforated slides, as $H H' H^2 H^3 H^4$, operating under the charger-block A, by means of which the quantity of powder or shot required in the shell may be gaged and regulated by increasing or diminishing the depth of the charging-holes, substantially as described.

2. The series of adjustable slides H, with perforations L and slots $n m$, combined with the charger-block A and stop-bars R R', substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES W. OSGOOD.

Witnesses:

E. O. FRINK,

D. E. STONE.