

No. 783,098.

PATENTED FEB. 21, 1905.

J. T. BRAYTON.
CARTRIDGE.

APPLICATION FILED JAN. 23, 1904.

Fig. 1.

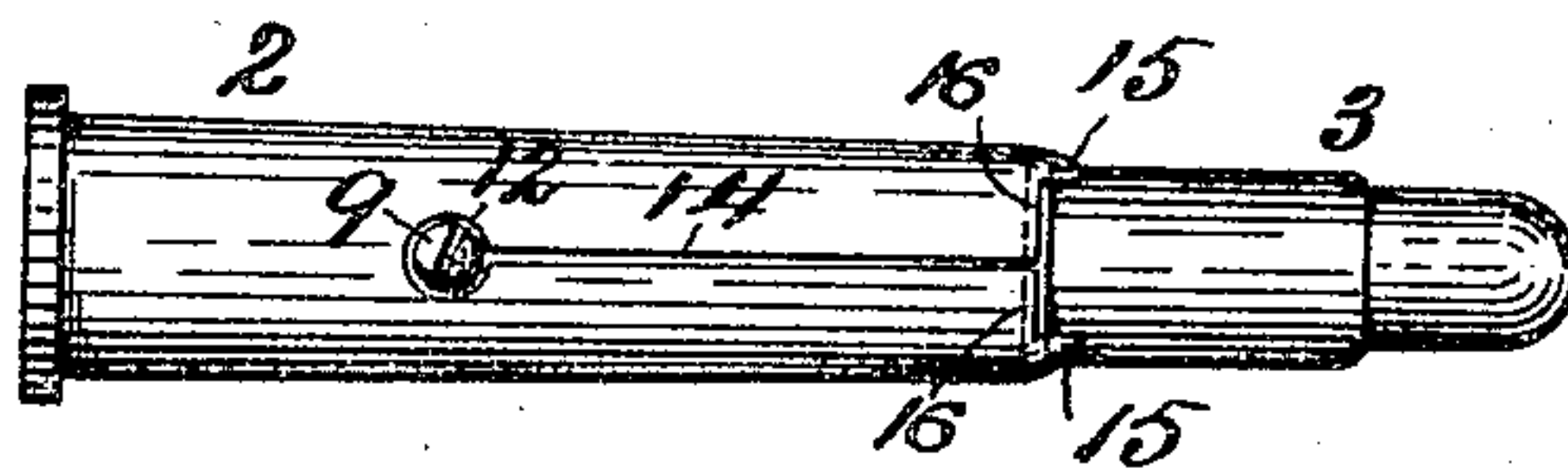


Fig. 2.

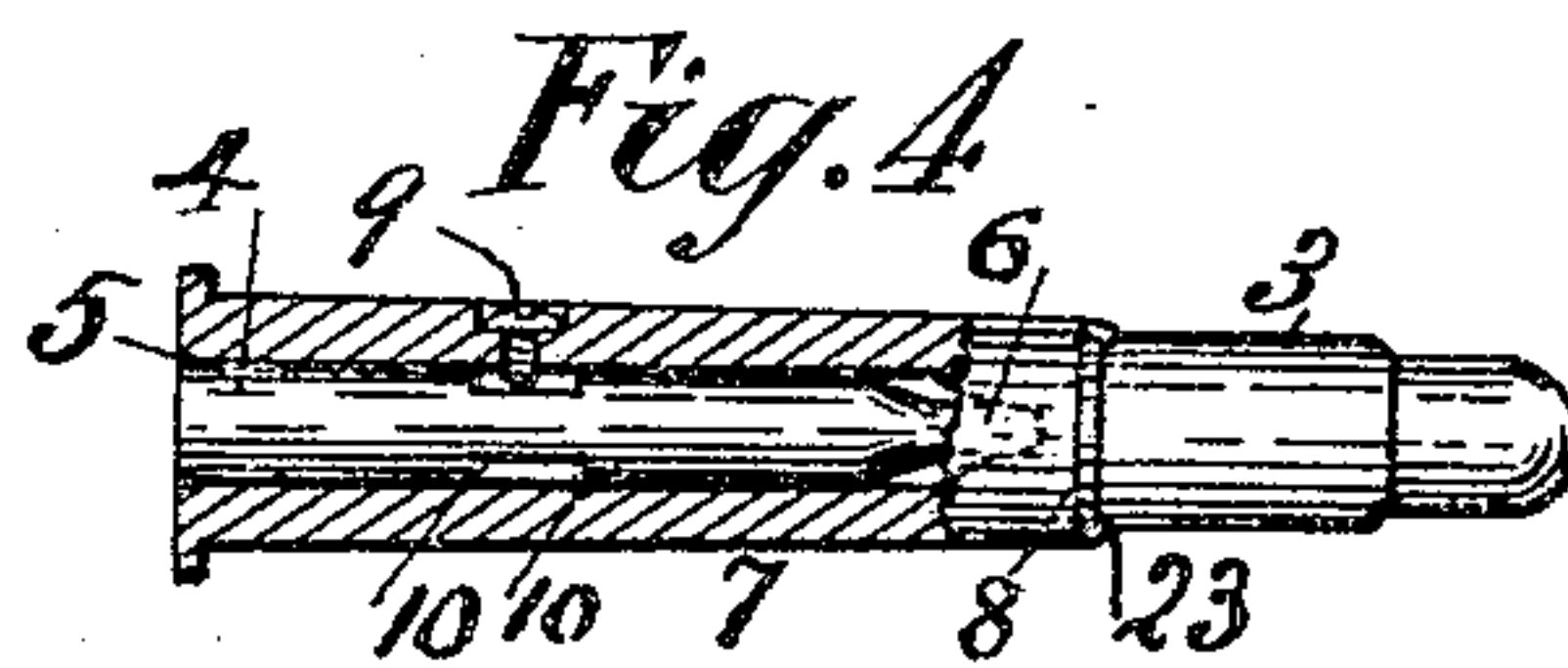
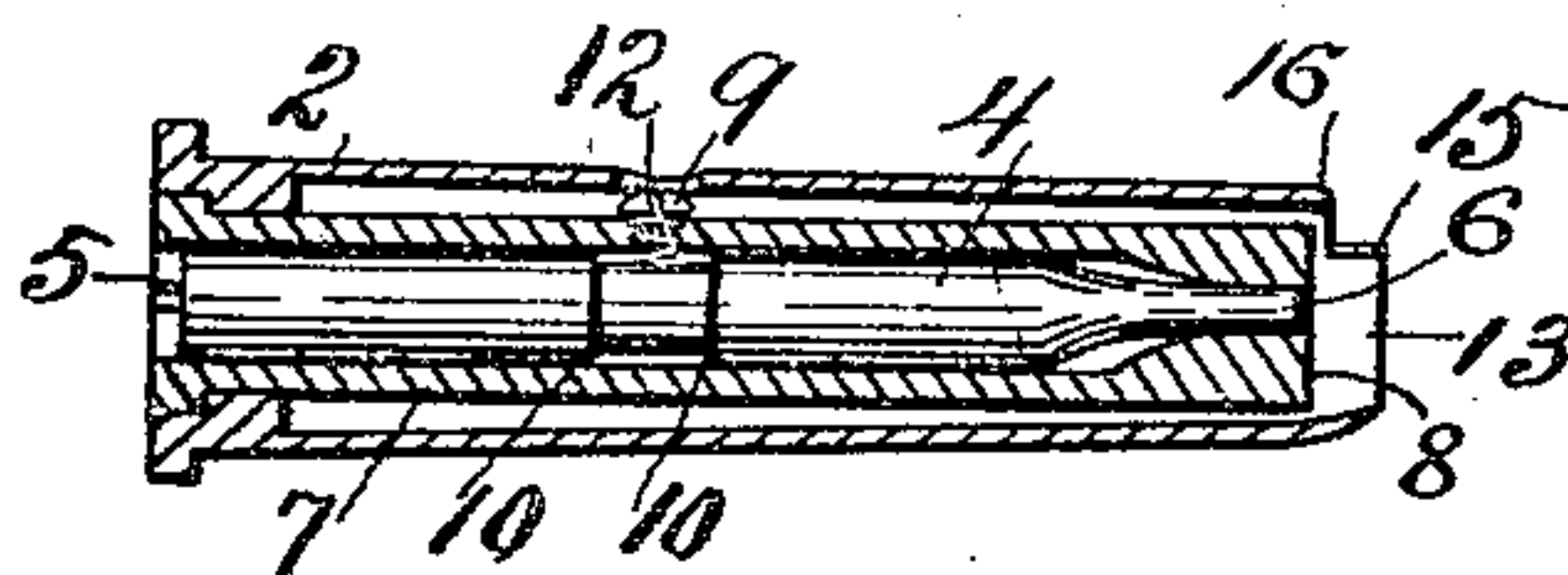


Fig. 3.

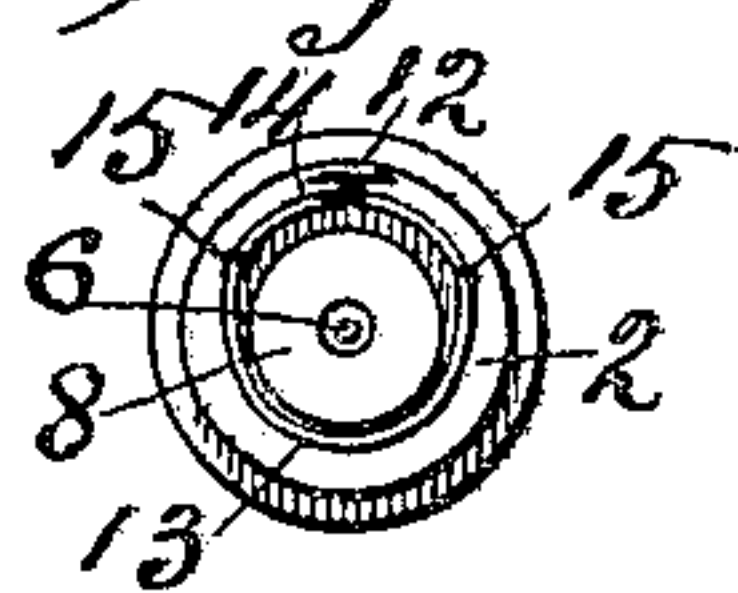
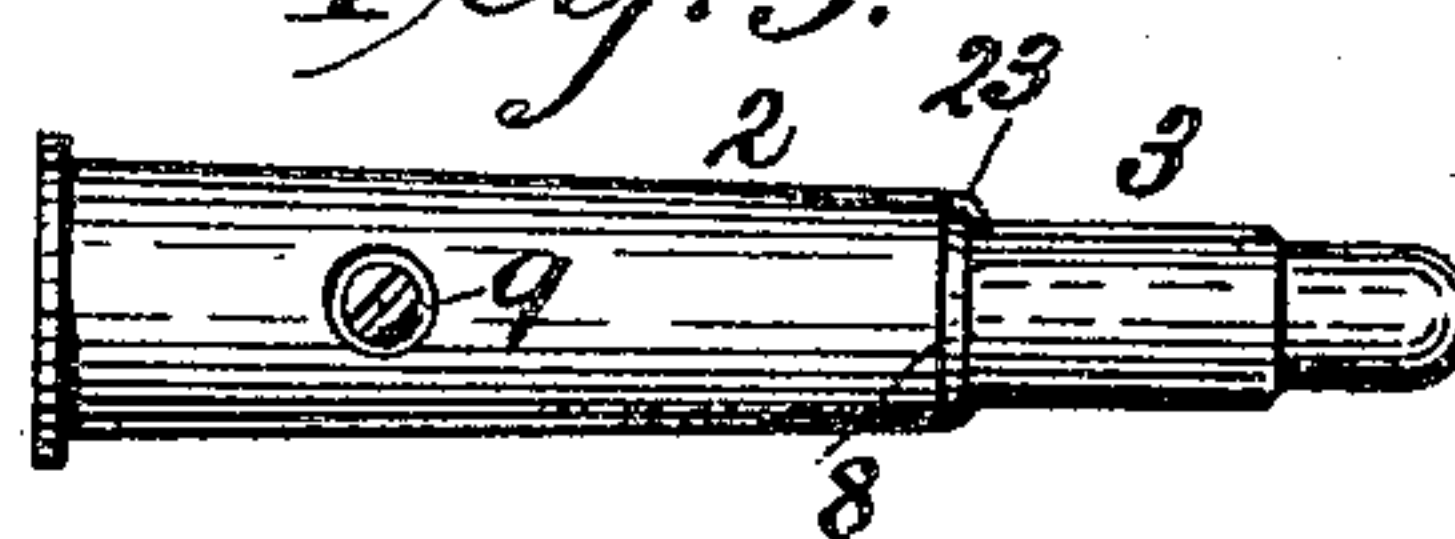


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES T. BRAYTON, OF CHICAGO, ILLINOIS.

CARTRIDGE.

SPECIFICATION forming part of Letters Patent No. 783,098, dated February 21, 1905.

Application filed January 23, 1904. Serial No. 190,265.

To all whom it may concern:

Be it known that I, JAMES T. BRAYTON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cartridges, of which the following is a specification.

My invention relates to cartridges designed for use in the Krag-Jorgenson and similar rifles and carbines where, as for indoor or short ranges or in gunning for small game, the heavy regulation charge used in such arms is undesirable. In other words, my invention relates to a light-charge cartridge designed for use in guns constructed to carry heavy charges, thus enabling the arm to be used with equal facility and accuracy of aim for both long and short ranges.

In constructing my new cartridge I employ an auxiliary shell of proper length and of proper diameter to fit the breech of the gun, the inner end of which auxiliary shell is adapted to receive and hold in alinement therewith a small or light-charge cartridge of the usual or of any approved form of construction. After firing the arm the auxiliary shell is extracted, which in turn extracts the small empty shell, which is then detached from the end of the auxiliary shell and another cartridge put in its place for the next load.

In the accompanying drawings, to which reference is made and which form a part of this specification, Figure 1 is an elevation of my invention, showing a light-charge cartridge in place ready to be introduced into the breech of the gun. Fig. 2 is a sectional elevation of the auxiliary shell. Fig. 3 is a front elevation of the auxiliary shell, and Figs. 4 and 5 illustrate a modification.

In the drawings, 2 designates the auxiliary shell, and 3 the light-charge cartridge held at the end thereof. The auxiliary shell 2 is provided with a firing-pin 4, adapted to be struck by the hammer of the gun through an aperture 5 in the head of the auxiliary shell, so that the point 6 of the firing-pin will explode the charge in the cartridge 3. The firing-pin 4, as here shown, works in a hollow core or breech-block 7, the front end 8 of which serves as the breech-lock to the cartridge 3.

The firing-pin is prevented from longitudinal movement beyond certain limits, preferably by a small stud or screw 9, the firing-pin being reduced in diameter to form spaced shoulders 10 10; but I do not limit myself to any special means for limiting the movement of the firing-pin. The stud or screw 9 is inserted through an aperture 12 in the shell, as shown. By removing the stud or screw 9 the firing-pin may be taken out for cleaning or for other purposes.

The front end of the auxiliary shell 2 is adapted to have the light-charge cartridge quite firmly attached to it, so that the two may be inserted into the gun together and so that when the auxiliary shell is extracted it will extract the exploded shell. The means for attaching the light-charge shell to the end of the auxiliary shell may be variously constructed, and therefore I do not limit myself to any special form of attaching device. The attaching and extracting device shown is cheap, effectual, and convenient and is the form preferred. It consists, as shown in Figs. 1, 2, and 3, of a spring clasp, clamp, or claw 13, shaped to engage with the head or flange of the cartridge and adapted to have the cartridge sprung into it by pressure from one side and to have the empty shell removed by the reverse motion. The front end of the shell is extended beyond the breech-block 8, and a portion is cut away, forming an entrance space of less extent than the diameter of the flange or head of the cartridge-shell. The portion not cut away, which forms the holding device proper, is crimped inward to engage the flange of the cartridge, as shown in Fig. 1. In order that the holding-flange may have a desirable spring-action, the outer shell is slit, as shown at 14. I prefer that the said slit should extend back to the aperture 12, and though this is not necessary, yet it improves the action of the ends of the clasp. The edges 16 16 project slightly in front of the breech-block 8, and when the cartridge 3 is put fairly in place the said edges 16 16 spring over or upon the flange of the cartridge and aid in holding the head of the cartridge flat against the face of the breech-block. When inserted in the gun, the bullet is seated properly at the commence-

ment or rear ends of the rifling-grooves in the barrel, so that there is no opportunity for the gases due to the explosion to escape forward around the ball, and the entire force of the charge is utilized in projecting the ball, and no gases can escape rearward to injure the arm or the auxiliary shell, and to the more effectually prevent gases from escaping rearwardly I make the auxiliary shell about two thousandths of an inch larger in diameter than the regular cartridge, which can be done, as there is no expansion in the shell to cause sticking.

In the form shown in Figs. 4 and 5 the cartridge 3 is held directly by the breech-block by means of claws 23, into which the flange of the cartridge is slipped by a sidewise movement, substantially the same as in Figs. 1, 2, and 3, the breech-block being made of proper diameter to fit in the breech of the gun.

By providing the end of the auxiliary cartridge with holding devices into which the light-charge cartridge is slipped by a sidewise movement the cartridge may be put in place and detached with facility and ease and without danger of the priming coming in dangerous contact with the firing-pin.

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

1. An auxiliary cartridge formed at its front end with a crimped and segmental clasp projecting in front of its breech-block and adapted to receive a light-charge cartridge-shell by lateral insertion, substantially as and for the purposes described.

2. An auxiliary cartridge formed at its front end with a crimped and segmental main clasp projecting in front of its breech-block and adapted to receive the light-charge cartridge-shell by lateral insertion, and a secondary clasp lying in front of the breech-block at the opening through which the light-charge cartridge is inserted into the main clasp, substantially as described.

3. An auxiliary cartridge having a casing extended at its front end beyond the breech-block and cut away for a distance slightly less than the diameter of the light-charge shell to form a main clasp and also to form the clasping edges 16 16, substantially as described.

JAMES T. BRAYTON.

Witnesses:

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JNO. WALSH.