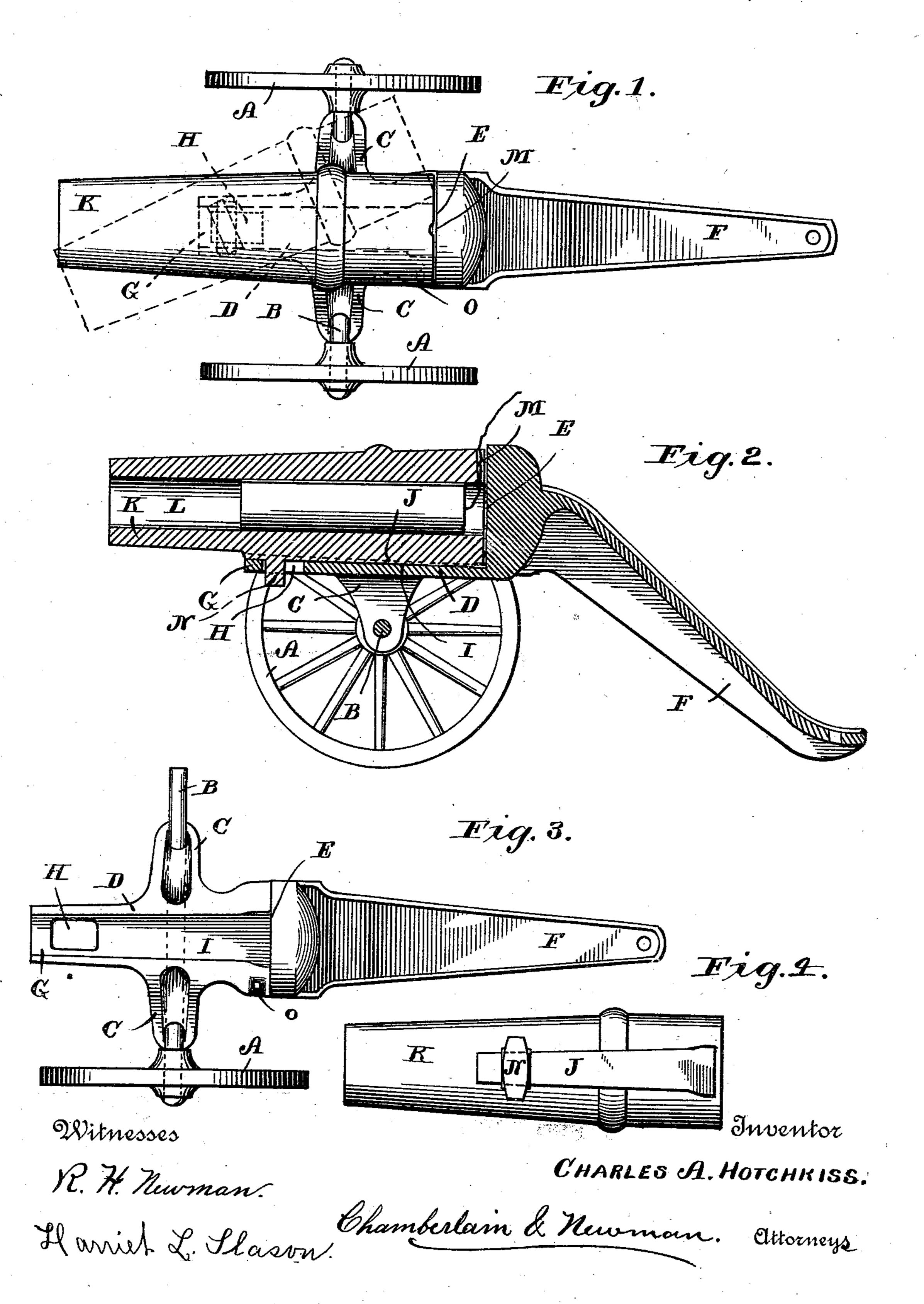
C. A. HOTCHKISS. TOY CANNON.

No. 556,057.

Patented Mar. 10, 1896.



United States Patent Office.

CHARLES A. HOTCHKISS, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE IVES & WILLIAMS COMPANY, OF SAME PLACE.

TOY CANNON.

SPECIFICATION forming part of Letters Patent No. 556,057, dated March 10, 1896.

Application filed December 24, 1895. Serial No. 573,182. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. HOTCHKISS, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and 5 State of Connecticut, have invented certain new and useful Improvements in Toy Cannons, of which the following is a specification.

My invention relates to new and useful improvements in toy cannons of the class known as "fire-cracker" cannons, and more particularly to breech-loading toy fire-cracker cannons.

It is the object of my invention to generally improve upon this class of toys, to lessen the cost of producing the same, and, further, to particularly insure safety when in the hands of inexperienced persons.

The construction of my invention is such as to enable me to dispense with the necessity of any milling, drilling, tapping, or fitting of the parts, and allows me to assemble them in the condition in which they are cast.

With these objects in view I have devised the simple and novel construction which is illustrated in the accompanying drawings, forming part of this specification, and in which—

Figure 1 shows a plan view of my improved toy cannon complete, and also shows by dotted lines the open position of the breech. Fig. 2 shows a central vertical sectional view of my cannon and illustrating the fire-cracker in the barrel thereof. Fig. 3 shows a plan view of my improved toy, one wheel and the barrel being removed therefrom. Fig. 4 shows an inverted view of the barrel detached.

As before stated, this cannon is of the breech-loading type, which necessitates providing for the admission of explosives into the breech. This is done by swinging the barrel in a novel manner laterally upon its carriage and inserting the load in the barrel from one side of the breech-block. (See dotted lines, Fig. 1.) As will be seen, the toy is formed complete of five pieces, the barrel being one piece, the carriage and breech-block are made integral and form the second piece, and the wheels and axle make up the remain-

50 ing three pieces.

Referring to the letters of reference indicated upon the drawings, A A indicate the wheels, which serve to support the cannon, and B the axle to which the wheels are attached. Said axle is journaled in depending 55 ears C C, which are formed integral with the carriage D. At the rear of said carriage I form integral and at a right angle therewith a vertical-faced breech-block E, which in turn is provided with a suitable trail F, which is 60 properly hollowed out upon its under side to produce lightless and at the same time have a substantial and favorable appearance.

The carriage D is provided with a forward extension G, which is provided with an oblong orifice H, extending lengthwise therewith and in the center thereof. Said carriage is further provided throughout its length with a centrally-lengitudinal recess I to receive a corresponding enlargement J upon the under 70 side of the barrel. The barrel, which I designate as K, is provided with the usual central bore L and a fuse-recess M, which preferably extends up vertically from the center of the bore.

About midway of the length of the barrel and upon the under side thereof I provide a depending interlocking lug N, which clearly appears in Figs. 2 and 4, and whose lower extremity is of a width somewhat greater than 80 that of its upper portion, which construction admits of said lug being inserted into the orifice H when said barrel is at a right angle to the carriage, and when so inserted and the barrel turned back into position against the 85 teat O upon the rear of the carriage said barrel becomes pivotedly fixed thereto. In this connection it will be seen that the proper centering of the barrelis insured when the breech is thrown in position by said enlargement J 90 properly settling into the recess I of the carriage, they being, as before stated, of corresponding dimensions.

In the assembling of this toy the barrel and carriage are first assembled in substan- 95 tially the manner above mentioned, when one of the wheels is fitted against the headed end of the axle B and the free end of the axle inserted into the holes of the depending ears, when the other wheel is fitted to the free end 100

of the axle and the same riveted down against the hub of said wheel. Thus completed, the wheel forms a guard against the removal of the barrel from the carriage, as will be readily understood with reference to Fig. 1.

The end of the breech-block E, as before stated, is preferably cut perfectly vertical and at a right angle to the barrel, so as to snugly receive the end of the barrel, which prevents any unnecessary or objectionable movement of the same when in active operation.

I am aware that toy cannons of various designs have been produced, also that breech-15 loading cannons, in some respects similar to my present invention, are among those which have been manufactured and placed upon the market, and, further, that breech-blocks having an inclined face and formed integral 20 with the carriage are old. This latter construction in particular I have found to be objectionable from the practical fact that owing to such inclined connection said breech will be thrown open by the explosion of the 25 fire-cracker therein, which construction will admit of part of said explosive being discharged out of said breech, much to the displeasure of the attendant.

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

1. In a toy breech-loading cannon, the combination of an integral carriage, a vertically-faced breech-block, a barrel having an oblong enlarged headed lug integral with and at a right angle thereto upon the under side of 35 said barrel, an orifice in the carriage, adapted to receive said lug when the barrel is at a right angle to the carriage aforesaid, thus permitting an interlocking and swinging connection, substantially as shown and described. 40

2. In a toy breech-loading cannon, the combination of an integral carriage and vertical-faced breech-block, an orifice and longitudinal recess in the carriage, a barrel having an interlocking lug upon the under side thereof, 45 to engage said orifice, an enlargement to fit into the recess and center the barrel thereby, substantially as described.

Signed at Bridgeport, in the county of Fair-field and State of Connecticut, this 17th day 50

of December, A.D. 1895.

CHARLES A. HOTCHKISS.

Witnesses:
C. M. NEUMAN,
W. P. BANKS.