(No Model.)

C. NEUHAUS.

TOY PISTOL.

No. 494,432. Patented Mar. 28, 1893.

Fig. 1.

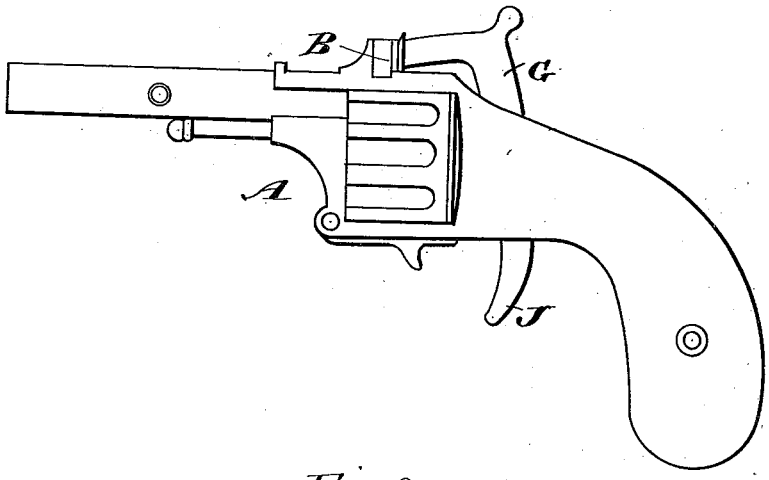


Fig. 2.

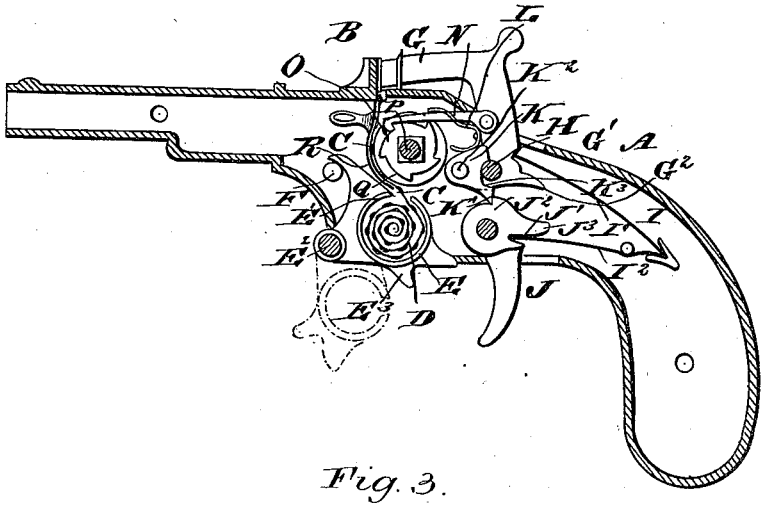
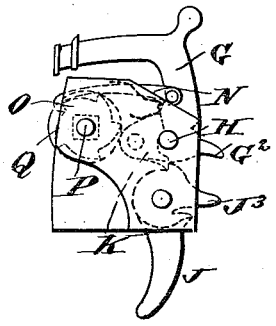


Fig. 3.



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TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 494,432, dated March 28, 1893.

Application filed April 7, 1892. Serial No. 428,119. (No model.)

To all whom it may concern:

Be it known that I, CARL NEUHAUS, of Vienna, Austria-Hungary, have invented a new and Improved Toy Pistol, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved toy pistol which is simple and durable in construction, self-cocking and more especially designed to explode paper percussion caps.

The invention consists principally of a fixed block, a casing containing a ribbon provided with percussion caps and adapted to pass in front of the said block to be exploded by a hammer, the latter imparting a traveling motion to the said ribbon.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter described and claimed.

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

Figure 1 is a side elevation of the improvement. Fig. 2 is a sectional side elevation of the same; and Fig. 3 is a side elevation of part of the stock with the hammer, trigger and adjacent parts in position.

The improved toy pistol is provided with a suitably constructed casing A imitating in shape an ordinary revolver as plainly illustrated in Fig. 1. On the top of the casing A at the rear end of the imitation barrel of the casing A is arranged a block B on the front of which are adapted to be exploded, the percussion caps C arranged at one side of a ribbon D and located suitable distances apart as plainly illustrated in Fig. 2. The ribbon D is wound in a roll and is adapted to be passed into a cylindrical casing E formed on the top with a slot E′ through which passes the ribbon to extend upward through the casing to finally pass to the front face of the block B.

The cylindrical casing E is mounted on an arm pivoted at E^2 to the under side of the casing A, the upward motion of the arm being limited by a stop pin F. The cylindrical casing E is fitted snugly at its sides into the casing A so as to be held therein by friction existing between its ends and the sides of the casing A.

On the lower end of the casing E is arranged a finger piece E^3 for conveniently swinging the casing into a lowermost position, as shown in dotted lines in Fig. 2, so as to enable the operator to conveniently insert a new roll of ribbon with the percussion caps thereon. The percussion caps C are exploded successively on the block B by a hammer G pivoted at H in the casing A and pressed on by one arm I′ of a V-shaped spring I held in the said casing and actuating with its other arm I^2, a trigger J also pivoted in the casing A. The free ends of the arms I′ and I^2 engage suitable notches G′ and J′ formed in the hammer G and trigger J respectively, as plainly shown in Fig. 2.

On the top of the trigger J is formed a shoulder J^2 adapted to engage a lug K′ projecting from an arm K pivoted at K^2 to the hammer G in front of its pivot pin H. The back edge of the arm K is formed with a recess K^3 fitting onto the pivot pin H and shaped in such a manner as to permit an up and down swinging motion of the said arm K. The hammer G is also formed with a rearwardly-extending foot G^2 arranged near the pivot H and adapted to be engaged by a similar foot J^3 formed on the trigger J.

Now, when the device is in the position, shown in Fig. 2, and the operator pulls on the trigger J, then the shoulder J^2 presses on the lug K′ of the arm K and as the latter is pivoted to the hammer G at the front of the pivot H, the upper part of the hammer will swing rearwardly away from the block B. On a further rearward pull of the trigger J, the shoulder J^2 will finally disengage the lug K′ as the arm K swings upward, thus releasing the hammer G and permitting the spring arm I′ to force the hammer G forward to strike the percussion cap C on the front face of the block B. When the operator releases the trigger J the latter will return to its normal position by the action of the spring arm I^2, the arm K swinging inward as the lug K′ rides over the shoulder J^2 until it finally drops in front of the same, as shown in Fig. 2. The hammer G can also be cocked by hand by pulling the hammer rearwardly. When in the rearmost position, the foot G^2 rests on the foot J^3 of the trigger J and when the latter

is pulled, the foot J^3 presses on the foot G^2, thus causing the latter to swing upward until the hammer is started and the spring arm I forces the hammer with the necessary force forward to explode the cap on the face of the block B.

In order to hold the arm K in the proper position but permitting its upward motion, a spring L is employed fastened in the casing A and pressing the top edge of the said arm. On the hammer G is pivoted a pawl N engaging with its hooked end a ratchet wheel O secured on a shaft P extending transversely and mounted to turn in suitable bearings in the casing A.

On the shaft P is secured a wheel Q made of rubber or other suitable material and adapted to press on one side of the ribbon D, the latter resting with the other side on a spring R attached to the casing and extending downward from the block B close to the opening E′ of the casing E, as plainly shown in Fig. 2. The pawl N is held in contact with the ratchet wheel O by an arm of the spring L pressing on top of the said pawl, as indicated in Fig. 2.

Now, it will be seen that when the hammer G swings rearward by pulling the trigger J as above described and cocking it by hand as mentioned, then the pawl N will impart a rotary motion to the ratchet wheel O so that the wheel Q is likewise turned, and as it engages the ribbon D the latter is fed upward traveling over the spring R to pass in front of the block B. It is understood that a recess is formed in the top of the casing directly in front of the block B for the passage of the ribbon D.

The percussion caps C are located such a distance apart to correspond with the distance the ratchet wheel is turned by the rearward swinging of the hammer G, so that at every rearward movement of the hammer, the ribbon E is removed upward a sufficient distance to bring a new percussion cap C to the front face of the block B and in the path of the free end of the hammer G. Thus, it will be seen that by this device, the simple pulling on the trigger J actuates the hammer G and also brings a new percussion cap automatically to the striking block B in the path of the free end of the hammer G so that when the latter is on the return stroke, the cap is exploded in the usual manner.

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

1. The combination with the frame, and the trigger having a shoulder on its upper edge, of the hammer provided on its pivoted end with a rocking dog or arm having a limited upward and rearwardly swinging movement at its lower end permitting it to ride over the trigger shoulder and engage the forward side thereof, said shoulder acting first to bring the hammer to a full cock and then by a further pull on the trigger to release it by disengaging the lower end of the said dog, substantially as set forth.

2. The combination with the frame, and the trigger having a shoulder J^2 on its upper edge, of the hammer provided with a rocking dog or arm K pivoted to its lower end in front of its pivot to swing rearwardly and upwardly to ride over the shoulder J^2 and engage the front face thereof; the rocking movement of the dog or arm K being limited by the hammer pivot, and a spring pressing downward upon the dog or arm in rear of its pivot, said shoulder acting first to bring the hammer to a full cock and then by a further pull on the trigger to release it by disengaging the lower end of the said dog, substantially as set forth.

3. The combination with the frame, and the trigger having a shoulder J^2 on its upper edge and a rearwardly projecting foot J^3, of the hammer G provided with a rearwardly extending foot G^2 over the foot J^3, a rocking dog or arm K on the lower end of the trigger in front of the pivot thereof and having a lug K′ on its upward and rearwardly swinging lower end to ride over shoulder J^2 and engage the front face thereof, a spring bearing down on the dog or arm in rear of its pivot; the hammer pivot serving as a stop to limit the rocking movement of the dog or arm, and a V spring the ends of which engage the trigger and hammer respectively, substantially as set forth.

4. The combination with the frame having an anvil, a feed wheel to feed the percussion tape past the anvil, and a ratchet wheel on the feed wheel, of the spring actuated hammer having a forwardly extending pawl between its ends engaging said ratchet, a rocking spring actuated dog on the lower end of the hammer, and the trigger having a shoulder on its upper edge to engage the lower end of the rocking dog, said shoulder acting first to bring the hammer to a full cock and then by a further pull on the trigger to release it by disengaging the lower end of the said dog, substantially as set forth.

5. The combination with the frame, the tape feeding and the firing mechanism, of a downwardly swinging arm pivoted at E^2 in a slot in the lower face of the frame in front of the trigger and provided on its upper side with a tape carrying casing E having a slot E′ for the passage of the tape to the feeding mechanism, substantially as set forth.

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Witnesses:
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