

(No Model.)

A. GILMAN.

TOY PISTOL.

No. 297,379.

Patented Apr. 22, 1884.

Fig. 1.

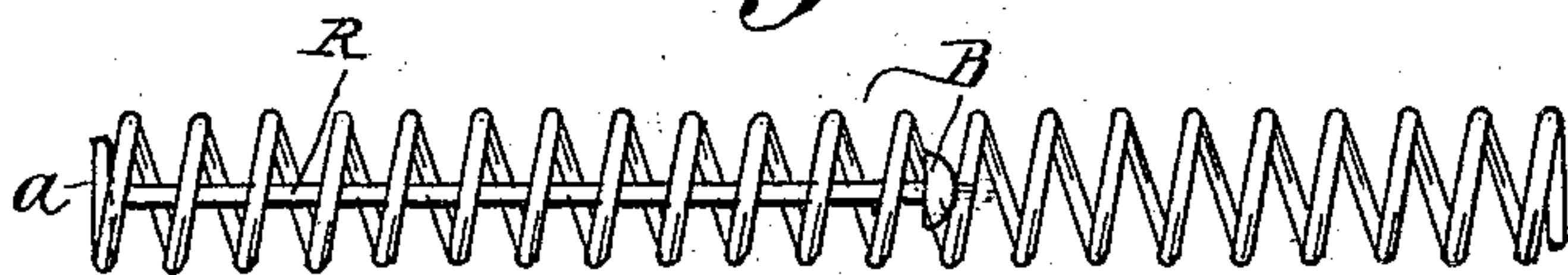
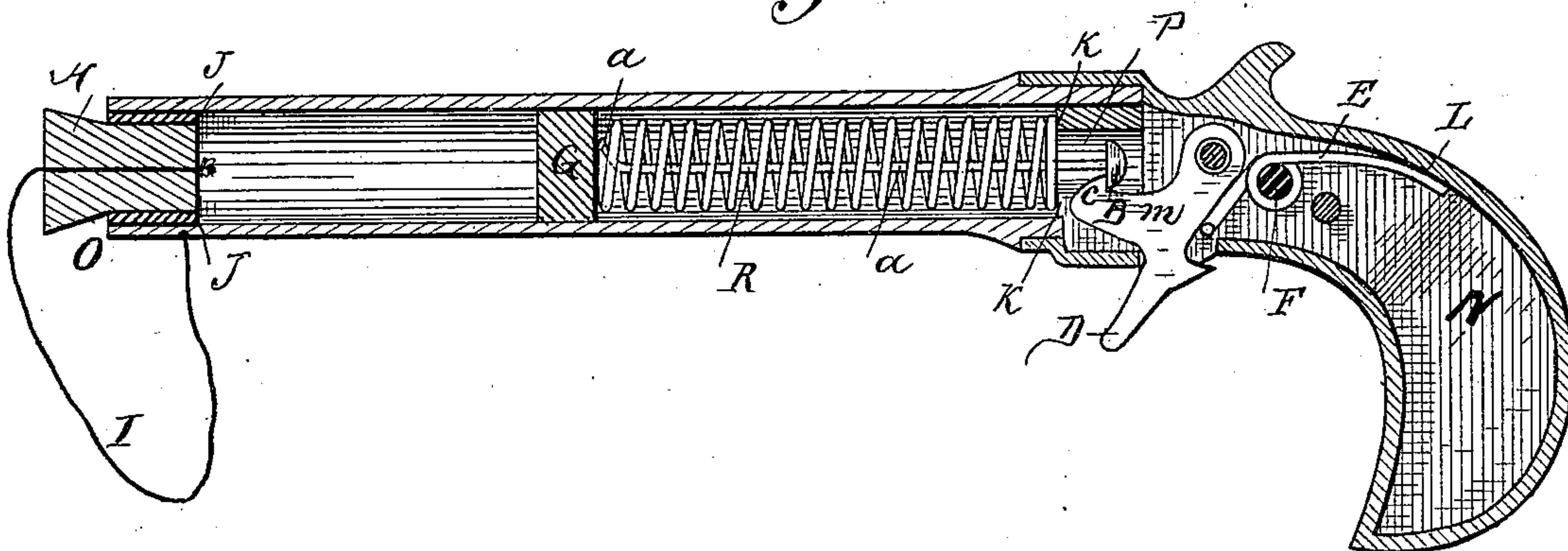


Fig. 2.



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TOY PISTOL.

SPECIFICATION forming part of Letters Patent No. 297,379, dated April 22, 1884.

Application filed April 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, AMBROSE GILMAN, of Shelburne, in the county of Franklin and State of Massachusetts, have invented certain new
5 and useful Improvements in Toy Pistols, &c., of which the following is a full, clear, and exact description.

This invention relates to toy pistols or guns which will cause an explosion or report, or
10 throw a bullet or other projectile without the use of any explosive compound or material, and consequently without danger of injury to the person handling the same.

The invention consists in the combination,
15 with a suitable barrel having closely-fitting cork or corks or other suitable substance, of a spiral spring located and confined in said barrel, which has an interior wire or stem in continuation of and formed from the same wire
20 as the coils of said spring, provided with a knob hook or shoulder, and of a suitable trigger placed in relation to the said spiral spring to engage its knob or shoulder when the spring is depressed, and adapted to release such en-
25 gagement for the discharge of the pistol or gun, substantially as described.

In the accompanying plate of drawing this invention is illustrated as applied in a toy pistol, Figure 1 being a side view of the novel
30 spiral spring used in this invention; and Fig. 2 is a vertical sectional view through the length of the pistol, showing the operating parts in their positions when ready to be discharged.

In the drawings, N represents the chambered
35 handle or stock of the pistol carrying in continuation thereof the barrel. This barrel is shouldered near the muzzle O, as at J, and it is also shouldered at its rear end, as at K, and between these shoulders in the barrel is the
40 spiral spring R. As plainly shown in the drawings, this spiral spring has its wire forming such spring at its forward end *a* turned inwardly, and extends as a stem or rod rearward in the direction of the length and with-
45 in the coils of the spiral spring for a portion of its length—say when the spring is free or not depressed—for about one-half its length, where such stem terminates in a knob, shoulder, or hook, B.

50 At the forward end of the spring R is a cork or plug, G, or other suitable substance, tightly

fitting the barrel, and for the purposes of this invention made air-tight.

m represents a trigger located and suitably pivoted in the chambered stock N, and a bent
55 spring, E, coiled around a stud or post, F, of said stock, bears, by its one end, on the trigger *m* and by its other end against the side of the stock, as at L; and this spring exerts its pressure on the trigger to maintain it to its proper
60 action. The trigger *m* has a notch, *c*, at its portion toward the barrel, as shown.

In the operation of this invention as an air or "pop" gun, to produce an explosion or re-
65 port, the cork G, by a suitable rod, is forced toward the rear of the barrel against the spiral spring R, which will cause the spring to be compressed, as shown in Fig. 2, sufficiently for its interior stem to protrude through and beyond the coils of the spring R, and by its end
70 shoulder or knob, B, it will engage the notch *c* of the trigger *m*, thus securing the spiral spring in its compressed form. The cork or plug H (which is preferably confined by a cord or string, I, to a notch or groove of the muz-
75 zle end of the barrel, as shown) is then forced into the muzzle O. It will be seen that an air-space is left between the cork H and the cork G in the barrel. Pressure in the usual man-
80 ner at the part D of the trigger depresses the same against its spring E, carrying its notch *c* out of engagement with the knob B of the interior stem of the spiral spring R when such spiral spring is released to its action, carrying,
85 as it rebounds forward from the shoulder K of the barrel the cork G toward the muzzle, compressing the air in the barrel, and, as is plain, the cork H will be discharged from the muz-
zle O and the report occur, all as well known.

It is plain, of pistols or guns constructed in
90 accordance with this invention, that no injury is liable to occur to the person handling the toy or gun, as no explosive compound or material is used, and this, it will be seen, is a great advantage.

The invention is simple of construction, and
95 cheaply and easily made, is durable, and will not get out of order.

When not intended for use as an air or pop gun to produce a report, it may be made to
100 throw a bullet or projectile, in which use of it the cork H would not be used.

The stem or wire of the spring R, carrying the knob or shoulder B, instead of extending inside the coils of the spring, may be carried outside and still be capable of the same use and in the same manner; but it is most practical, and intended, mainly, to be used, as particularly shown and described.

Any form of trigger suitable for engagement and release of the knob B of the spring R other than the particular form of trigger herein shown and described may be employed, if desired, without departing from this invention.

The barrel shown is preferably made of wood, and is made in the form of a tube of uniform bore. An annular plug or ring, P, is inserted at its breech end, and glued or otherwise secured in position, which plug P makes the shoulder K, and is suitably formed to allow the passage through it of the knob B of the spring-stem, and is also so cut out on its under side as to accommodate the trigger, as seen in the drawings.

The ring shown in the muzzle is glued or otherwise secured in place after the spiral spring described has been properly placed in the barrel, and serves to keep the said spiral spring R and the cork G from flying out of the barrel when the pistol is discharged.

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

1. In a toy pistol or gun, the combination, with a spiral spring having a rod or stem in continuation of and formed of the same wire as the coils of said spring, extending from the

front toward the rear of said spring, and provided with a knob or shoulder, B, of a barrel shouldered at each end, and a trigger suitably located and arranged to engage and release the knob B of said spring, substantially as described.

2. In a toy pistol or gun, the combination, with a shouldered barrel, of a spiral spring, R, having an internal wire or stem in continuation of and formed of the same wire as the coils of said spring, extending from the front toward the rear of said spring, and provided with the knob or shoulder B, the cork or substance G, located in said barrel at the forward end of said spring, and the trigger suitably hung, and having a notch, c, and spring E, all arranged for operation substantially as described.

3. In a toy pistol or gun, the combination, with a shouldered barrel, of a spiral spring, R, having an internal wire or stem in continuation of and formed of the same wire as the coils of said spring, extending from the front toward the rear of said spring, and provided with the knob or shoulder B, the cork or substance G, located in said barrel at the forward end of said spring, and the cork or substance H, for closing the muzzle of said barrel, and the trigger, suitably hung, and having a notch, c, and spring E, all arranged for operation substantially as described.

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Witnesses:

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