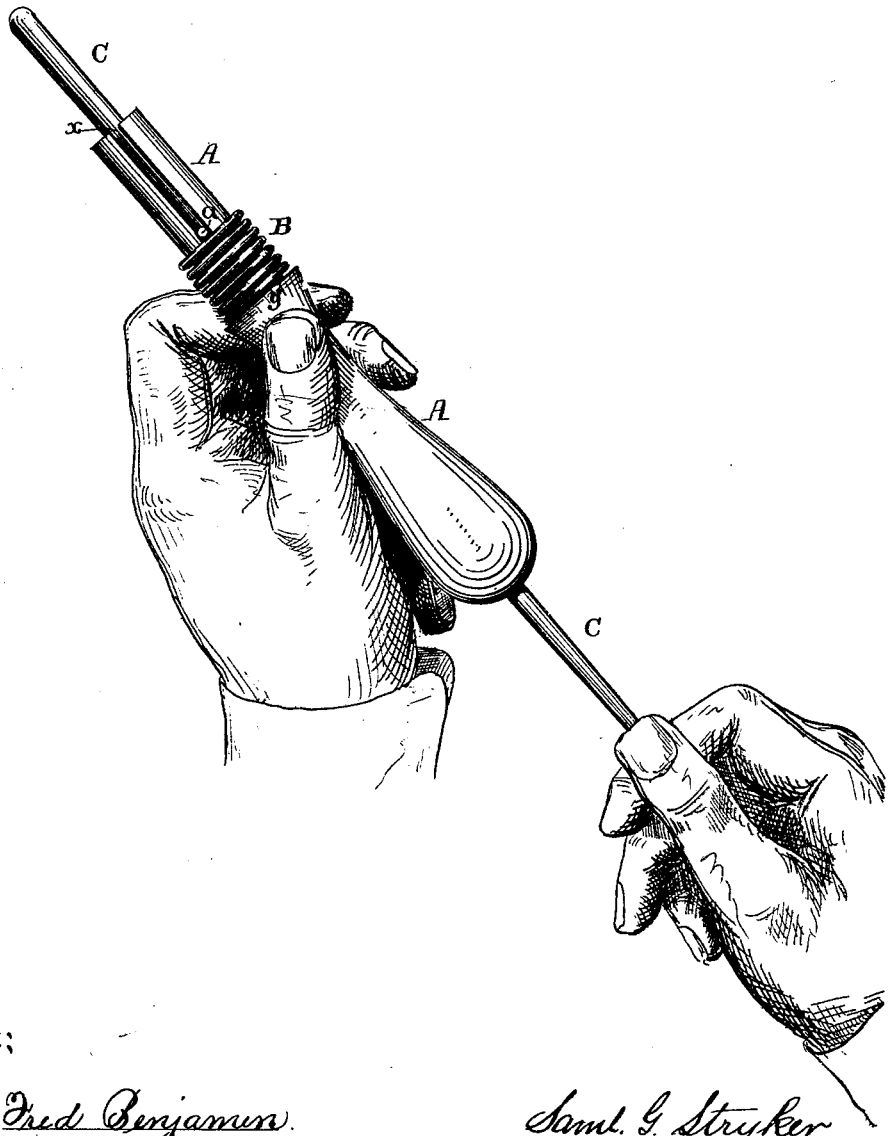
S. G. STRYKER.

TOY SPRING-GUNS.

No. 181,114. Patented Aug. 15, 1876.



Attest;

Fred Benjamin.

Frank Pr. Greene.

Saml. G. Stryker
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Charles E. Foster

UNITED STATES PATENT OFFICE.

SAMUEL G. STRYKER, OF ELMIRA, NEW YORK.

IMPROVEMENT IN TOY SPRING-GUNS.

Specification forming part of Letters Patent No. **181,114**, dated August 15, 1876; application filed July 20, 1876.

To all whom it may concern:

Be it known that I, SAMUEL G. STRYKER, of Elmira, county of Chemung, and State of New York, have invented a Toy Spring-Gun, of which the following is a specification:

The object of my invention is a toy spring-gun, constructed as described hereafter, to discharge a shaft or arrow, effective in operation, and capable of being made at a very small expense.

The accompanying drawing illustrates my invention and the mode of using it.

The stock A is of wood, metal, papier-maché, or other suitable material, has a longitudinal opening extending the entire length, and has longitudinal slots *x x*, extending from the forward end to a shoulder, *y*. Round the stem of the stock, beyond the shoulder *y*, is coiled a wire spring, B, which rests against the shoulder, and is secured thereto. The projectile consists of a shaft, C, of wood or other light material, small enough to pass readily into the opening in the stock, longer than the latter, and provided with a cross-bar, *a*, the opposite ends of which extend into the slots *x x*, and bear upon the coiled spring B.

When the parts are thus arranged the stock is seized in the left hand of the operator, while the right grasps the projecting end of the shaft behind the stock and draws it back, so as to compress the coiled spring between the cross-bar *a* and shoulder *y*. Upon releasing the end of the shaft the spring, acting on the cross-bar *a*, will throw the shaft forward and expel it from the stock with a force proportioned to the power of the spring.

I do not confine myself to the precise construction of parts shown and described, as they may be altered in form and modified without departing from the principle of my invention. For instance, the coiled spring may be arranged within the stock to act on a shoulder on the shaft, or a tubular rubber spring may be substituted for the coiled-wire spring.

It will be seen that the stock may be formed in an ordinary lathe, that the spring, whether of wire or rubber, may be readily applied, and that the whole structure is so simple, and consists of such cheap materials, that it can be produced at a nominal expense.

I claim—

1. The combination, with the stock A, provided with a shoulder and with an opening extending through both the stem and handle, of a tubular or coiled spring bearing on said shoulder and guided by the stem, as set forth.

2. The hollow stock A, its shoulder *y*, and slots *x x*, adapted to receive the ends of a cross-bar, *a*, on the arrow or projectile, between which bar and the shoulder a spring may be compressed, as specified.

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

Witnesses: SAML. G. STRYKER.

A. P. FASSETT,

ROWELL R. MOSS.