

R. WYLIE.
Spring-Gun.

No. 220,325.

Patented Oct. 7, 1879.

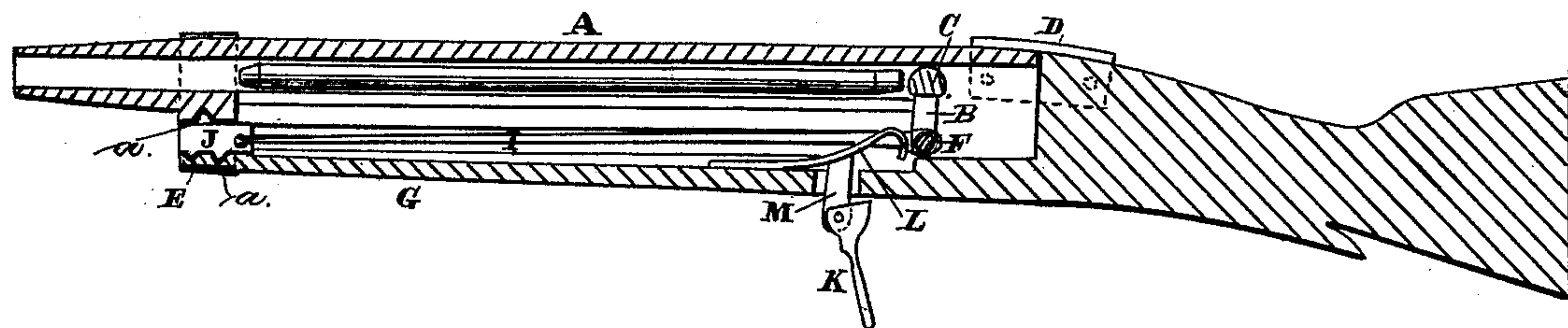
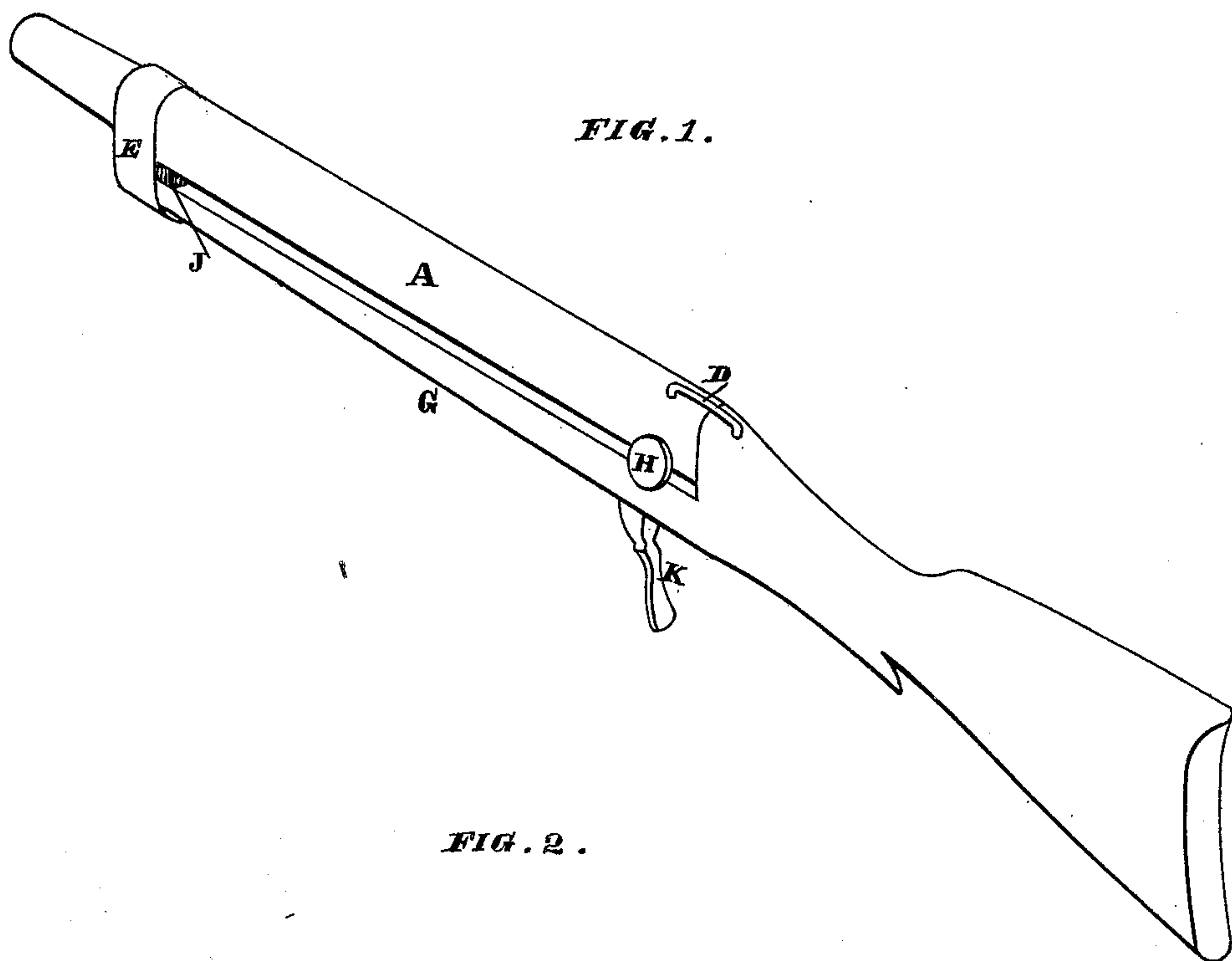
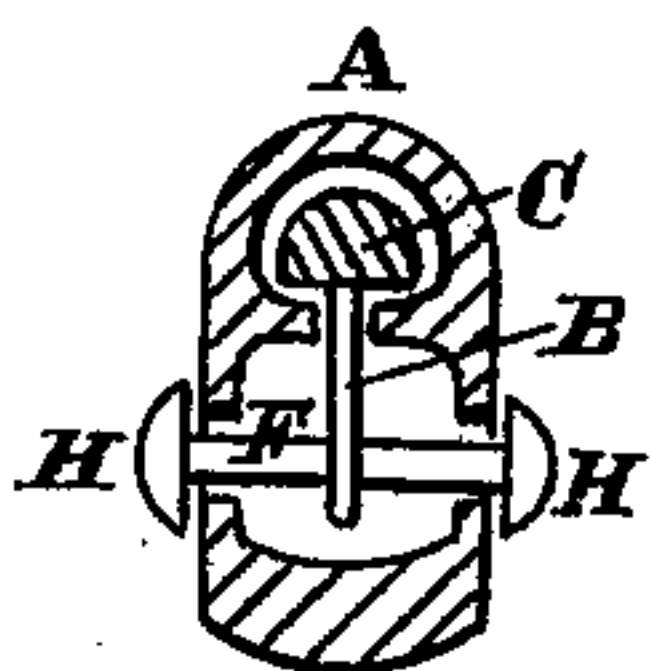


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

RICHARD WYLIE, OF NAPA, CALIFORNIA.

IMPROVEMENT IN SPRING-GUNS.

Specification forming part of Letters Patent No. **220,325**, dated October 7, 1879; application filed July 22, 1879.

To all whom it may concern:

Be it known that I, RICHARD WYLIE, of the town and county of Napa and State of California, have invented an Improved Direct-Acting Elastic Gun; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to an apparatus for throwing missiles, projectiles, or arrows, which I call the "telepult;" and it consists of a gun or weapon having a barrel suitably connected with a stock and having a slot in its lower part.

A driving-block for the arrow or projectile moves in the barrel, and has a stem projecting down through the slot, so as to have the firing elastic straps attached to it. These straps are contained in a chamber beneath the barrel, and have one end secured at the front, so that their tension may be regulated. A bar extends across this chamber, and, projecting out through slots at the sides, has buttons attached to its outer ends. The stem of the driver and the ends of the elastic firing-straps are connected with the cross-bar, and by drawing the buttons back until the bar engages with the trigger or detent, the arrow may be placed in the barrel, and the weapon is ready for firing. This is accomplished by pulling the trigger and releasing the bar.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my gun. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section.

The barrel A is a hollow cylindrical tube, made of any suitable material, having at its bottom a longitudinal incision or slot, made for the purpose of admitting a metal shank, B, and head C of the discharger, hereinafter described, by the forward motion of which any missile placed properly within said barrel is effectively delivered in a straight line.

The barrel is held in its place by a fastening, D, at its base or breech end, and by a clamp, E, at its outer end or near to that end, as hereinafter described.

The three parts of metal are the combined loader and discharger F, the combined clamp and box E, and the combined automatic power-catch and lever-trigger.

The combined loader and discharger consists of a straight bar, F, of steel or other metal, capped at both ends by knobs of metal H, and bearing in the center of said bar a shank, B, of metal, extending upward within the incision of the barrel into its cavity, and there terminating in a round ball or head, C, the purpose of which is, by its motion from the back part of said cavity in the barrel toward the front part of the same, to expel the missile that may be placed within said barrel.

The knobs before mentioned are for the purpose of drawing the combined loader and discharger back toward the breech of the barrel, for the purpose hereinafter described.

The combined clamp-box E passes around the end of the barrel and over the end of the stock G, and when in position holds securely the ends of the stock and barrel, at the same time clamps the rebounding pad J, to which the elastic straps I are secured, between the grooved or serrated faces *aa* of the stock and barrel, thus holding said pad securely in position, and the expansive force of the elastic pad tending to force the barrel A and stock G apart, bears them against the fastening E sufficiently hard to prevent it from slipping off.

The combined automatic catch and lever-trigger K is so arranged that a spring, L, rises immediately after the passage backward of the bar of the loader, and in this manner secures the bar F, which is thus retained until it is discharged at the will of the user of the weapon by the movement of the trigger. The trigger K is hinged to a link, M, which connects it with the spring L, and in such a manner that the rear part the trigger acts as a lever, pressing upon the lower part of the stock, when pulled, so as to act upon the link and spring-catch.

The three parts of india-rubber are the two propelling straps or bands I and the rebounding pad J.

The propelling straps or bands are of india-rubber, and are fastened at their ends nearest to the breech of the gun to the before-mentioned bar F of the combined loader and discharger, while at their other end they are secured in the rebounding pad by the clamp-box in such a manner that the drawing

back of the combined loader and discharger produces a tension of the bands or straps, and the power so obtained is secured by the bar F passing back of the automatic catch K, and so remains ready for delivery in a direct line for the propulsion of the arrow-bolt or bullet placed within the barrel of the weapon for use as a missile.

The other part of india-rubber is the rebounding pad and combined band-fastener J. Its uses are three: First, to arrest the bar F and head C without injury and with the least possible noise when its missile has been expelled; secondly, to hold securely the outer fixed end of the india-rubber straps, both while in place for action, and also when disconnected in part by the removal of the combined clamp-box, as may be done for examination or adjustment when either may be necessary; thirdly, by its elasticity to aid in keeping the clamp-box in its proper place; still further, the rebounding pad, being movable, may be changed either to a horizontal or a vertical position between the stock and barrel, and by this the tension of the straps or bands attached increased or diminished, as may be desired.

By this construction I am enabled to apply the force of the elastic propelling straps or bands in a line with the direct motion of the projectile, while the barrel has no side openings,

and the elastic straps are concealed and protected. They are secured in place and adjusted by the rebounding pad and clamp, which also receives and checks the forward impulse of the driver and bar. The weapon may be properly sighted and is very accurate.

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

1. The barrel A, with the head or driver C, connected by the shank B with the bar F, in combination with the elastic straps I, inclosed within the stock below the barrel, said straps having one end secured to the bar, while the other is retained and adjusted by the pad J, substantially as herein described.

2. The barrel A, secured to the stock G by the clamps D and E, in combination with the elastic pad J, whereby the clamp E is held in place, the driver C and bar F are checked in their forward movement, and the tensions of the straps I are adapted to be adjusted, substantially as herein described.

In witness whereof I have hereunto set my hand.

RICHARD WYLIE.

Witnesses:

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S. H. NOURSE.