

(No Model.)

D. M. HOLMES.
ARCHERY BOW.

No. 428,912.

Patented May 27, 1890.

Fig. 1.

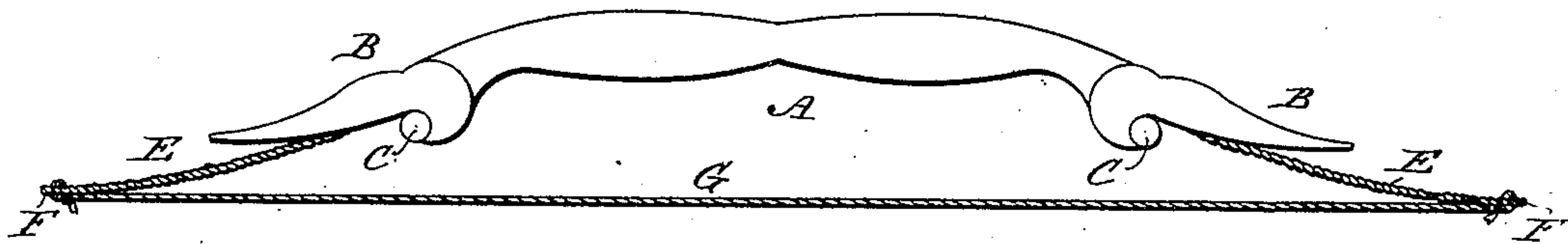


Fig. 2.

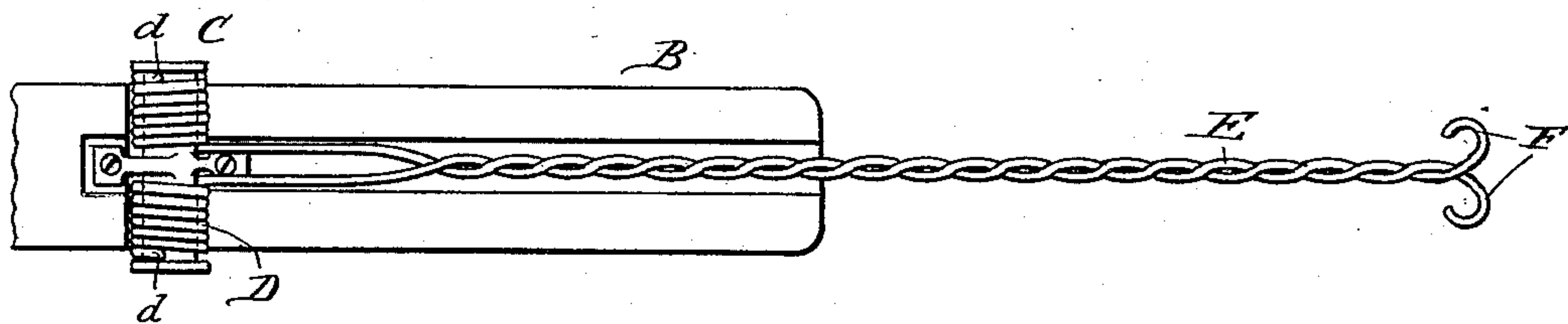
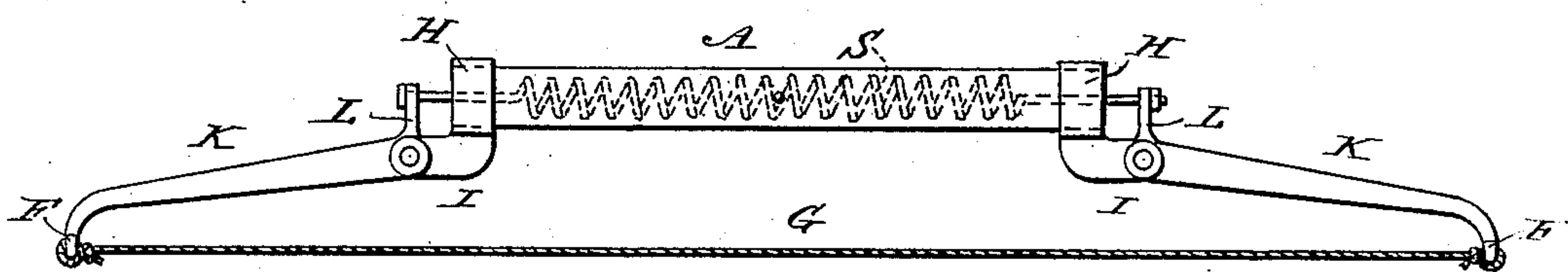


Fig. 3.



WITNESSES:

J. C. Reusch,
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UNITED STATES PATENT OFFICE.

DANIEL M. HOLMES, OF ARLINGTON, NEW JERSEY.

ARCHERY-BOW.

SPECIFICATION forming part of Letters Patent No. 428,912, dated May 27, 1890.

Application filed February 24, 1890. Serial No. 341,423. (No model.)

To all whom it may concern:

Be it known that I, DANIEL M. HOLMES, of Arlington, in the county of Hudson and State of New Jersey, have invented new and useful
5 Improvements in Archery-Bows, of which the following is a specification.

My invention relates especially to archery-bows for amusement, and has for its object the provision of a bow made in three parts
10 having great compactness and power, cheap and simple to construct, and effective in operation.

To attain the desired end my invention consists, essentially, in a bow having a central rigid portion or hand-piece, to which are
15 secured spring-arms, the outer extremities whereof engage with the bow-string; and my invention also involves certain other novel and useful combinations or arrangements of
20 parts, and peculiarities of construction and operation, all of which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a side view of
25 my improved bow. Fig. 2 is enlarged inside view of one of the spring-arms. Fig. 3 is a modified form of my bow, preferably made entirely of metal.

Like letters of reference, wherever they occur, indicate corresponding parts in all the
30 figures.

A is the central portion of the bow, made rigid and terminating in flattened extensions B.

35 C is a pivot, around which is coiled a double spring D, the ends *d* being secured to the pivot, and the free opposite ends of the springs twisted into an arm E, terminating in eyes F, to which the string G is secured.

40 In Fig. 3 the rigid central portion A of the bow is made of tubing, bearing at each end a ring H, provided with a finger I, wherein is pivoted an arm K, terminating in a string-eye F.

45 L is a finger projecting from arm K and engaging with the extremity of the wire of a spring S, passing through the center of the tube.

My improved bow will be found to be very compact and powerful, while from its peculiar construction the initial force with which
50 the string leaves the hand is maintained until the arms E strike against the extension B, where they find a rest. By curving the hand-piece, as shown, the hand grasping it is pro-
55 tected from injury when the string is released in shooting, and by placing the pivotal point near the inner edge of the hand-piece the spring-arms act through a greater distance of
60 movement than would be the case if the pivots were central or near the outer face of the bow.

Having now fully described my invention, what I claim as new therein, and desire to
65 secure by Letters Patent, is—

1. An archery-bow in which is comprised a rigid central portion having flat extensions
70 near each extremity, spring-arms pivoted at the base of each flat extension upon a rigid pin at a point substantially midway between the string and the hand-grasp, and a string
secured to the extremities of the spring-arms, the whole combined and arranged substantially as shown and described.

2. In an archery-bow, the combination, with
75 the rigid central portion, of a pivot fixed to the rigid portion of the bow at or near each extremity thereof, and wires encircling the rigid pins in opposite direction, forming
springs, one end of each of said wires being
80 extended and engaging with the bow-string, substantially as shown and described.

3. An archery-bow consisting of a rigid curved central portion terminating in flat ex-
85 tensions, in combination with spring-arms pivoted in the central portion near the base of each flat extension, and a string secured to the outer ends of the spring-arms, substantially as shown and described.

DANIEL M. HOLMES.

Witnesses:

A. M. PIERCE,
GERTRUDE WARD.