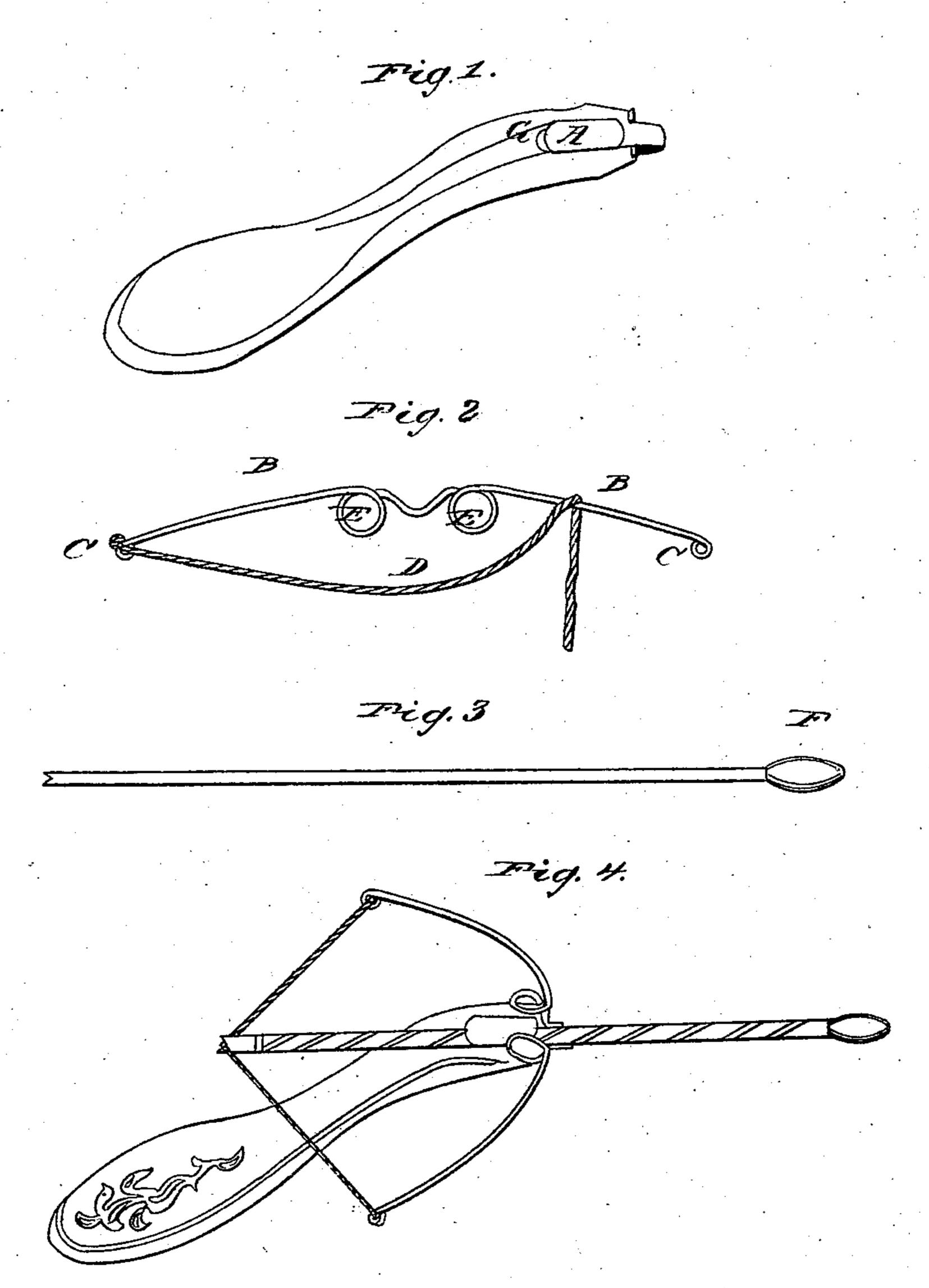
# J.M. Heen,

## Cross-Boward Arrow,

1,061,837.

Patented Feb. 5, 1867.



Witnesses

Hellywolds Georbes

Inventor

Juking

### Anited States Patent Pffice.

#### JAMES M. KEEP, OF NEW YORK, N. Y.

Letters Patent No. 61,837, dated February 5, 1867.

#### TOY CROSS-BOW.

The Schedule referred to in these Vetters Patent and making part of the same.

#### TO ALL WHOM IT MAY CONCERN:

Be it known that I, James M. Keep, of the city and county of New York, in the State of New York, have invented a novel and improved Toy Cross-Bow and Arrow, of which the following is a full, clear, and exact description, reference being had to the drawings accompanying this specification, and forming part of the same.

My invention consists in a novel manner of constructing a toy cross-bow and arrow, composed of a metallic stock or handle, a bow or spring of elastic wire, a cord of suitable dimensions, and an arrow or dart of wood, the head of which is covered with India rubber, combined and operating in a manner to be hereinafter described. In the drawings—

Figure 1 represents a perspective view of the handle or stock.

Figure 2, the spring or bow.

Figure 3, the arrow or dart.

Figure 4, a perspective view of the cross-bow and arrow complete.

By these drawings I have endeavored to illustrate a convenient mode of constructing my toy cross-bow

and arrow, the details of which will be readily understood by the following description.

Fig. 1 represents the handle or stock, having at its upper end or head the tube-like arrow-guide A for the purpose of guiding the arrow more perfectly, and being open on the under side as shown at G, of allowing the arrow or dart to be held in its position by the forefinger of the operator, thereby rendering the cross-bow susceptible of being discharged with one hand.

Fig. 2 represents the bow or spring of metallic wire, having at the outer extremities of its arms, BB, the eyelets CC, for the reception and securing of the cord D; and at the inner extremities, the spiral coils EE,

for the purpose of giving elasticity to the bow.

Fig. 3 represents the arrow or dart, of wood, furnished at its end with a head or tip of India rubber, as shown at F, covering or inserted into the head of the arrow for the purpose of increasing its weight and accuracy, and also of preventing damage to furniture, etc., with which it may come in contact when discharged.

Fig. 4 represents a perspective view of the toy cross-bow and arrow complete, and the position of its parts

while in the act of being discharged.

To enable others to manufacture and use my invention, I will proceed to describe the method of construct-

ing my toy cross-bow and arrow.

First, the stock or handle, as shown at fig. 1, is formed from sheet metal by stamping or other means, in such a manner that a portion of the metal near the head is forced above the surface in a tubular shape to form the upper part of the arrow-guide A, while at each end of this partial tube a portion of the metal is forced below the surface to form the lower part of the arrow-guide. Now it will be seen that under the portion of metal forced up, and between the portions forced down, will be left an opening, as shown at G, fig. 1, allowing of the arrow being held in its position in the guide by the finger of the operator. The bow having been formed of elastic wire, as represented at fig. 2, is attached in front of the arrow-guide to the head of the stock or handle, and a string or cord of proper length secured in the eyelets C C. An arrow or dart of any suitable shape having been provided, the cross-bow is now ready for operation, which is performed as follows:

The feather end of the arrow is inserted in the arrow-guide A, fig. 1, and forced down upon the cord D, fig. 2, to a proper distance, in which position it is held by the finger of the operator pressed upon the portion exposed in the opening beneath the head of the stock, and is discharged by quickly removing the finger. It will be readily understood that this combination constitutes a neat, cheap, and simple toy cross-bow and arrow, the novelty of which consists in the attaching of a bow or spring of elastic wire, constructed as herein described, to a handle or stock, of which the head is provided with the arrow-guiding tube A, fig. 1, having beneath it the opening G, to allow of the arrow or dart being held in its place by the finger of the operator, and discharged without the use of the trigger or other ordinary contrivances; and the providing the head of the arrow or dart with a guard of India rubber to render it incapable of causing injury to persons or substances against which it may be thrown.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction of a bow and stock or handle, with the arrow-guide, substantially as and for the purposes herein described.

J. M. KEEP.

Witnesses:

H. P. REYNOLDS, GEO. COWLES.