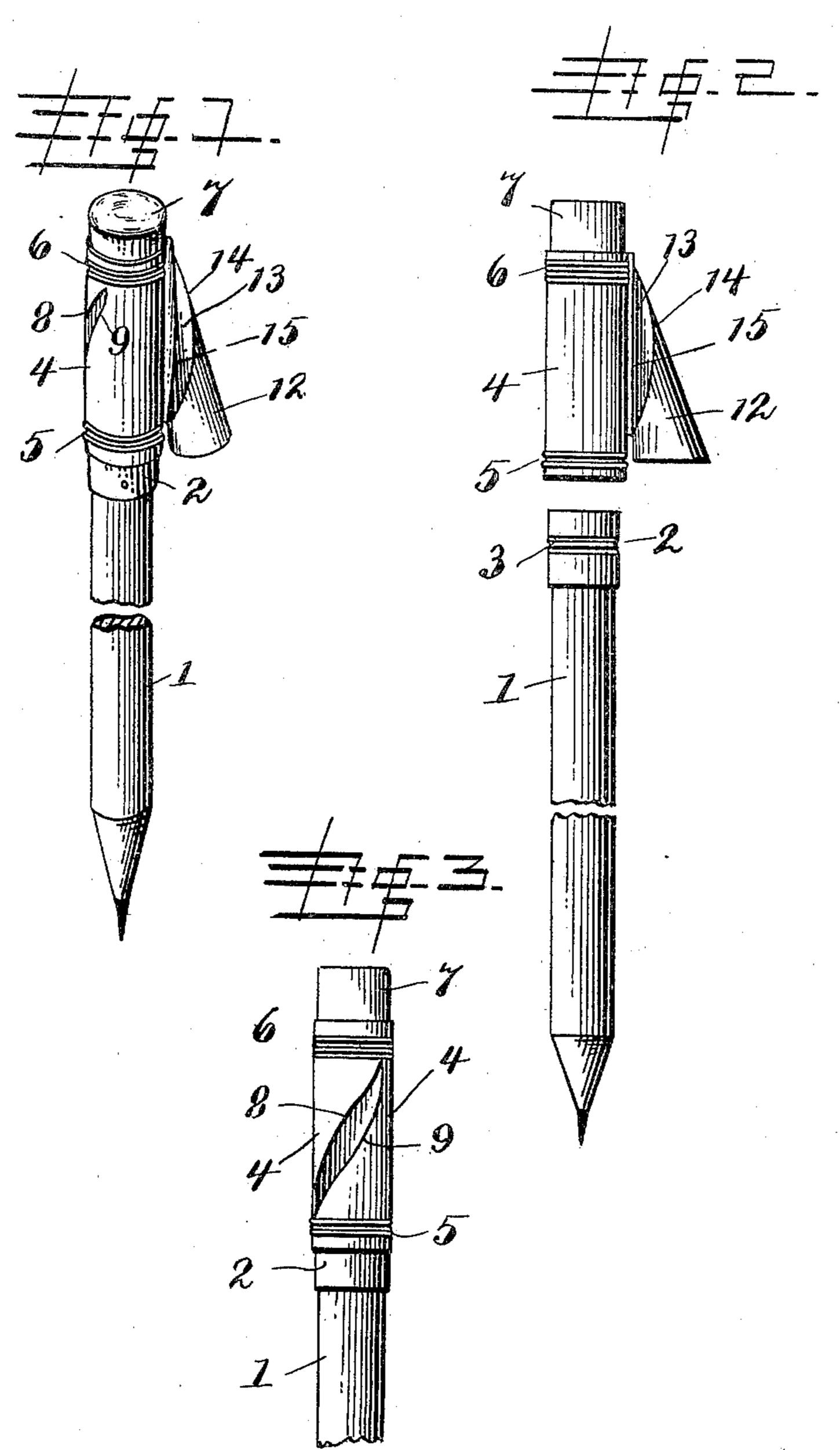
(Model.)

## I. CORY. DUPLEX PENCIL SHARPENER.

No. 604,731.

Patented May 31, 1898.



Witnesses M. E. Bowen Lalle Isaac Cory

Isaac Cory

By SHRWILLSouth

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## United States Patent Office.

## ISAAC CORY, OF NEW DECATUR, ALABAMA.

## DUPLEX PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 604,731, dated May 31, 1898.

Application filed July 28, 1897. Serial No. 646, 246. (Model.)

To all whom it may concern:

Be it known that I, Isaac Cory, a citizen of the United States, residing at New Decatur, in the county of Morgan and State of Alabama, have invented certain new and useful Improvements in Duplex Pencil-Sharpeners; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a novel form of duplex pencil-sharpener and eraser-tip combined, and the object is to provide a simple, inexpensive, and practical device of this class.

To this end the invention consists in the construction, combination, and arrangement of the several parts of the device, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same reference characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved duplex pencil-sharpener. Fig. 2 is a side elevation of the same. Fig. 3 is a similar view taken at a right angle to that shown in Fig. 2.

1 represents the pencil, which is provided 30 with a fixed cap 2, formed with an external thread 3, and 4 represents the cylindrical socket or sleeve, which is internally threaded at one end 5 to receive the cap 2, by means of which it is detachably secured to the pencil, 35 and at the other end 6 to receive the eraser 7.

8 represents a spiral slot formed in one side of the sleeve 4, and its opposite edges 9 10 are ground to a cutting or knife edge to trim the wood from the end of the pencil and at the same time form a point on the lead.

12 represents a conical hood fixed to the sleeve 4, and it is formed with an approximately longitudinal slot 13, one of the edges 14 of which is curved in a spiral form, while the other edge 15 conforms to a straight knife-edge extending approximately parallel with the axial line of the sleeve 4. The edge 14 forms a knife-blade, and by reason of its spiral contour it cuts the wood across the grain

o instead of cutting it parallel with the grain, thus obviating any tendency to split or splinter the wood, while the straight knife-edge 15

enables the operator to put a finishing point on the lead.

As shown in Fig. 2, the pencil, with its cap 55 2, is removed from the sleeve 4 and the pencil reversed, so that its pointed end may be inserted in said sleeve, and by an oscillating motion the cutting edges 8 and 9 alternately remove the wood and point the lead, the pencil being held at an obtuse angle to the sleeve and cutting edges and so inclined as to present the beveled side of the point parallel with said cutting edges. By this means the shape of the conical point given the pencil 65 may be varied from a long taper to a short blunt point by simply changing the angle of the pencil with reference to the cutting edges.

The hood 12 has no communication with the sleeve 4, and its cutting edge 14 is employed 70 to give the standard taper to the point, while the opposite edge 15 is used to give the finishing point to the lead, as above described.

Although I have specifically described the construction and relative arrangement of the 75 several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States,

1. A pencil-sharpener comprising the cy- 85 lindrical socket or sleeve 4, and the conical hood 12, provided with the straight cutting edge 15 and the spiral cutting edge 14, substantially as shown and described.

2. A duplex pencil-sharpener comprising 90 the cylindrical socket or sleeve 4, formed with the spiral slot 8, having the spirally-arranged cutting edges 9 and 10, and the fixed conical hood 12 provided with the straight cutting edge 15 arranged parallel with the axis of said 95 cylindrical socket, and the spiral cutting edge 14 extending around the axis of said hood, substantially as shown and described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

ISAAC CORY.

Witnesses:

CHAS. EPPERSON,
JNO. C. EYSTER.