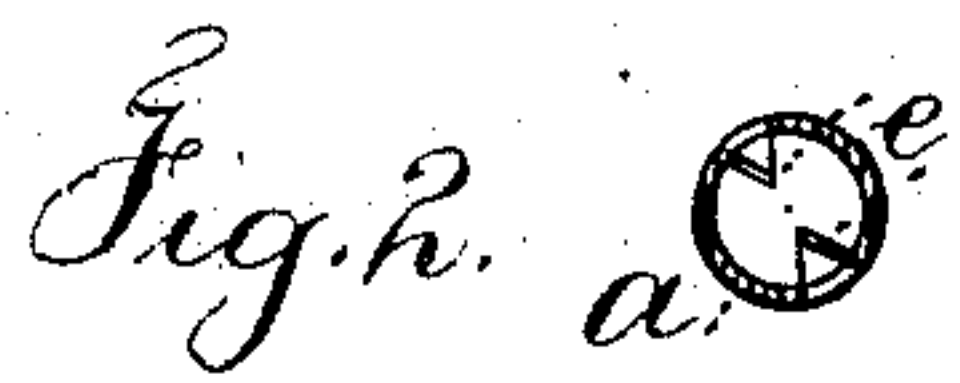
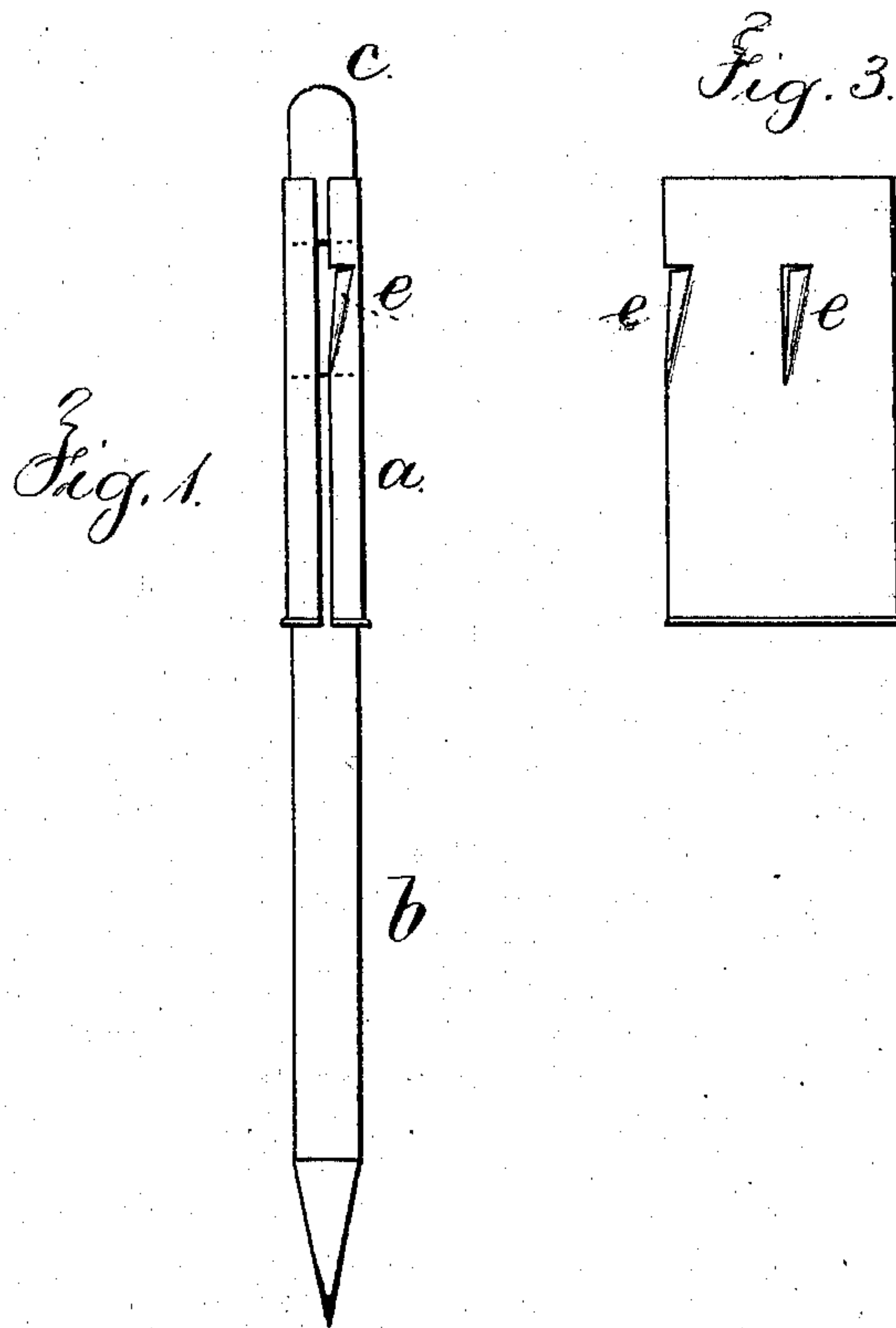


H. WAKEMAN.
Pencil-Sharpener.

No. 198,169.

Patented Dec. 11, 1877.



Witnesses
Harold Serrell
Chas H. Smith

Inventor
Harwood Wakeman

UNITED STATES PATENT OFFICE.

HARWOOD WAKEMAN, OF NEW YORK, N. Y.

IMPROVEMENT IN PENCIL-SHARPENERS.

Specification forming part of Letters Patent No. **198,169**, dated December 11, 1877; application filed August 16, 1877.

To all whom it may concern:

Be it known that I, HARWOOD WAKEMAN, of the city and State of New York, have invented an Improvement in Pencil-Sharpener, of which the following is a specification:

Sheet-metal tubes have been used to protect the point of a pencil, and this tube has also received at one end a piece of india-rubber.

I make use of a split tube of steel, with a cutter formed by bending in a portion of the sheet-steel and sharpening the edge, and one end of such tube receives an erasing-rubber, and the other end forms a point-protector.

In the drawing, Figure 1 is a side view. Fig. 2 is a cross-section; and Fig. 3 shows the piece of sheet metal as spread out flat.

The tube *a* is made of sheet-steel, of a size adapted to receive at one end the pencil *b*, and at the other end the erasing-rubber *c*; and this is not a complete tube, but it is a sheet of metal rolled up to form a slotted cylinder that springs to suit the slight differences in the sizes of pencils. The shape of this tube is similar to that heretofore employed; but being made of sheet-steel I am enabled to employ it as a pencil-sharpener. For this purpose I bend inwardly a portion of the sheet metal, as at *e*, and sharpen the edge to form a cutter, so that said cutting-edge extends from the inner surface of the sheet-metal cylinder to the axial line thereof, or nearly so,

and it is preferable to make the cutting-edge at an inclination to the edge of the sheet metal, as illustrated in the view, Fig. 3, which shows the piece of sheet metal out flat, in order that the cutting-edge may be a spiral line and act with a shearing cut toward the point.

There may be a second cutting-edge at the opposite side of the cylinder.

The tube or cylinder may be corrugated, or may have raised lines upon it, to prevent the tube from slipping while trimming the pencil.

The pencil is pressed into the cylinder end-wise and rotated, and the cutter or cutters serve to sharpen the point of the pencil, and the same cylinder answers as a point-protector, the pencil not being pressed in as far as the cutter; and this cylinder also holds the rubber, as aforesaid.

I claim as my invention—

The split tube *a*, made of sheet-steel, and adapted to receive the pencil *b* and erasing-rubber *c* at the respective ends, and having a cutter, *e*, formed of the sheet-steel bent inwardly, as and for the purposes set forth.

Signed by me this 13th day of June, A. D. 1877.

HARWOOD WAKEMAN.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.