J. WATROUS.

COMBINED PENCIL SHARPENER AND POINT-PROTECTOR.

No. 186,777. Patented Jan. 30, 1877.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Witnesses.

Joseph M. Reeman

A. F. Miller

Inventor.

Joseph Watrous

UNITED STATES PATENT OFFICE.

JOSEPH WATROUS, OF GROTON, CONNECTICUT.

IMPROVEMENT IN COMBINED PENCIL-SHARPENER AND POINT-PROTECTOR.

Specification forming part of Letters Patent No. **186,777**, dated January 30, 1877; application filed July 14, 1876.

To all whom it may concern:

Be it known that I, JOSEPH WATROUS, of the town of Groton, in the county of New London and State of Connecticut, have invented a new and Improved Pencil-Sharpener and Point-Protector Combined; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in a pencil-sharpener and point-protector combined, made of metal, in the form of a tube, with a cone-shaped end, which is provided with a cutting-edge. A spring is formed on one side of the sharpener to securely hold pencils of various sizes. A rubber head is placed upon the sharpener to protect the spring to aid in holding the sharpener while pointing the pencil, and to act as an eraser.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

It is constructed of metal, and is in the form of a tube, with a cone-shaped end, of the proper taper to give a good point to the pencil, as seen in the accompanying drawing, marked No. 1. The letter C is where the pencil is inserted.

A is the slot in the cone, where the cutting-edge is formed, and B is the opening for the point of the pencil. A cutting-edge is formed by bending down a lip on the right-hand side of the slot in the cone, and grinding it to a fine cutting-edge. The inside diameter of the sharpener is made a little larger than the pencil, as seen in the drawing, marked No. 7, letter A. The opening in the point of the cone is no smaller than the lead in the pencil, as seen in drawing, marked No. 4, letter A. From the top end of the sharpener, as seen in the drawing, marked No. 1, a slit is cut down about five-eighths of an inch, as seen in the drawing, marked No. 1, letter E. This slit is about one-eighth of an inch from the slit which follows the whole length of the sharpener. The metal between these slits is bent down, as seen in the drawing, marked No. 2, letter C, end view, and when tempered forms a spring, which securely holds pencils of various sizes. A rubber head is put on the sharpener, as seen in the drawings, marked Nos. 3, 4, 5, and 6. Its use is to cover and protect the spring, to aid in holding the sharpener while the pencil is being sharpened.

To use my sharpener, first put it on the pencil, and cut away the wood from the lead, as seen in the drawing, marked No. 4, until the point is the proper length, as seen in the drawing, marked No. 4, then draw back the lead into the cone, and tilt the pencil on one side, as seen in the drawing, marked No. 7, bringing the lead against the cutting-edge; then gently turn the pencil, and you will form a fine point at the angle you may desire, as seen in the drawing, marked No. 6.

To use the sharpener as a point-protector, draw back the lead into the cone, as seen in the drawing, marked No. 5, where it will be securely held by the spring on the side.

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

As a new article of manufacture, a pencil-sharpener and point-protector combined, provided with an inwardly-projecting spring, C, integral therewith, for the purpose specified.

JOSEPH WATROUS.

Witnesses:

JOSEPH M. FREEMAN,

A. F. MILLER.