(No Model.)

P. SCHRAG.

COMBINED PENCIL SHARPENER AND HOLDER.

No. 262,836. Patented Aug. 15, 1882.

Fig. 1.



Fig. 2.

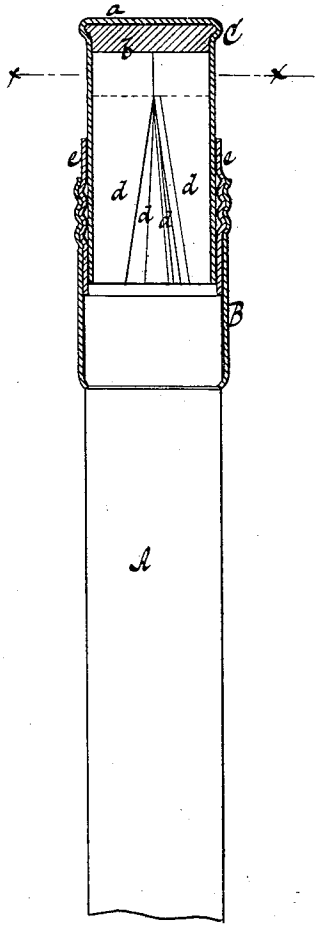


Fig. 3.

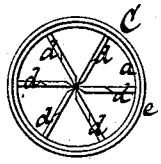
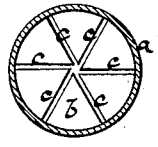


Fig. 4.



WITNESSES:

Otto Hupfeld

William Miller

INVENTOR

Philip Schrag

BY Van Santvoord & Hauff

ATTORNEYS

N. PETERS. Photo-Lithographer. Washington. D. C.

UNITED STATES PATENT OFFICE.

PHILIP SCHRAG, OF NEW YORK, ASSIGNOR TO EBERHARD FABER, OF PORT RICHMOND, N. Y.

COMBINED PENCIL SHARPENER AND HOLDER.

SPECIFICATION forming part of Letters Patent No. 262,836, dated August 15, 1882.

Application filed May 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, PHILIP SCHRAG, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Pencil Sharpeners and Pencil-Holders Combined, of which the following is a specification.

This invention relates to a pencil-sharpener which can be readily attached to the butt-end of a pencil-holder and removed therefrom when it is to be used for sharpening the point of the pencil projecting from the tip of the pencil-holder, the particular construction of my pencil-sharpener being explained in the following specification.

In the accompanying drawings, Figure 1 represents a side elevation. Fig. 2 is a longitudinal central section on an enlarged scale. Fig. 3 is an end view of the pencil-sharpener detached. Fig. 4 is a transverse section in the plane *x x*, Fig. 2.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a pencil-holder provided with a tip which consists of lead-retaining jaws and a suitable device for closing these jaws. On the butt-end of said holder is secured a screw-socket, B, which is by preference made of sheet metal, and into this screw-socket is fitted the pencil-sharpener C. This pencil-sharpener is constructed of a sheet-metal cap, *a*, in the closed end of which is firmly secured a head, *b*, provided with a series of radiating grooves, *c*, (see Fig. 4,) the depth of which is indicated in Fig. 2 by the distance between the dotted line, which indicates the face of the head *b*, and the full line, which indicates the bottom of the grooves. These grooves are intended to receive the inner ends of the blades *d*, which are driven down into the grooves, so as to be firmly retained in position. The cutting-edges of these blades are beveled, Fig. 2, so that they form a tapering socket for the purpose of pointing or sharpening the end of the lead which projects from the tip of the pencil-holder. On the outside of the cap *a* is firmly secured a tube, *e*, provided with a screw-thread which corresponds to the thread in the screw-socket B at the butt-end of the pencil-holder.

When the sharpener is not to be used it is screwed into the socket B of the holder, so as to impart to the butt-end thereof the proper finish, and when the point of the lead is to be sharpened the pencil-sharpener is unscrewed and applied to the head.

I am well aware that pencil-sharpeners provided with radiating cutting-blades have heretofore been fastened in grooves in the sides of the shell or cap intended for their reception.

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

1. The combination, substantially as hereinbefore described, of the pencil-holder, the screw-socket secured to or formed at the butt-end of said holder, the cap *a*, containing the cutting-blades *d*, and the tube *e*, fastened to the cap and provided with a screw-thread corresponding to the thread in the screw-socket.

2. The combination, substantially as hereinbefore set forth, of the cap *a*, the head *b*, secured in said cap and having radiating grooves, and the cutting-blades fitted into and retained by said grooves.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

PHILIP SCHRAG. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.