(Ne Model.)

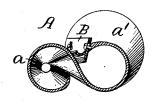
F. R. WATERS.

PENCIL SHARPENER.

No. 302,366.

Patented July 22, 1884.





Witnesses: Frank & Blanchard. I. M. Freeman

Inventor: Ysank R. Waters Bo S. B. bouhland Ho. Metorneys.

## UNITED STATES PATENT OFFICE.

FRANK R. WATERS, OF BLOOMINGTON, ILLINOIS.

## PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 302,366, dated July 22, 1884.

Application filed February 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. WATERS, of Bloomington, county of McLean, and State of Illinois, have invented certain new and useful Improvements in a Pencil-Sharpener, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of this invention is to provide a device that is more especially adapted for sharpening slate-pencils, and may also be worn on the watch-chain as a seal or charm.

on the water-chain as a seaf of chain.

Figure 1 is a side elevation of my improved device; Fig. 2, an enlarged transverse section.

Referring to the drawings, A represents the device, which is ordinarily formed of a single piece of sheet-steel; but any other material 20 suitable for the purpose may be used. The piece of material entering into the structure is rolled from the two ends diagonally to form the cone-shaped tubes a a', which are adapted to impart a corresponding shape to the pencil 25 or other object inserted in said tubes. The base or large end of one tube and the point of the companion tube lie together, thus giving the same width at each end, and presenting a device of a peculiar and convenient form. The 30 cutting-edges will ordinarily consist of the inner rolled ends of the plate, which are rolled

so as to leave an opening or space between the cutting-edge and the adjacent surface for the escape of the matter removed from the pencil. If desirable, one end of the metal sheet forming the sharpener may be bent outward at the extreme end, instead of inward, and provided with a rectangular slot for the reception of the knife-blade B, having elongated slots near each end for the insertion of the attaching-screws, as shown in Fig. 1, whereby said knife may be adjusted or removed at pleasure.

This device may be plated with a finer metal and made of a highly-ornamental character, and provided with a ring, b, or other suitable 45 device for attaching the same to a watch-chain or key-ring.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A pencil-sharpener consisting of two coneshaped tubes formed from a single sheet of metal, and having the base and point of each tube at alternate ends, one of the tubes being provided with an adjustable blade and the 55 other having its edge sharpened to form a cutting-edge, as herein set forth.

FRANK R. WATERS.

Witnesses:
MELVILLE ALCOTT,
GEO. F. CARLILE.