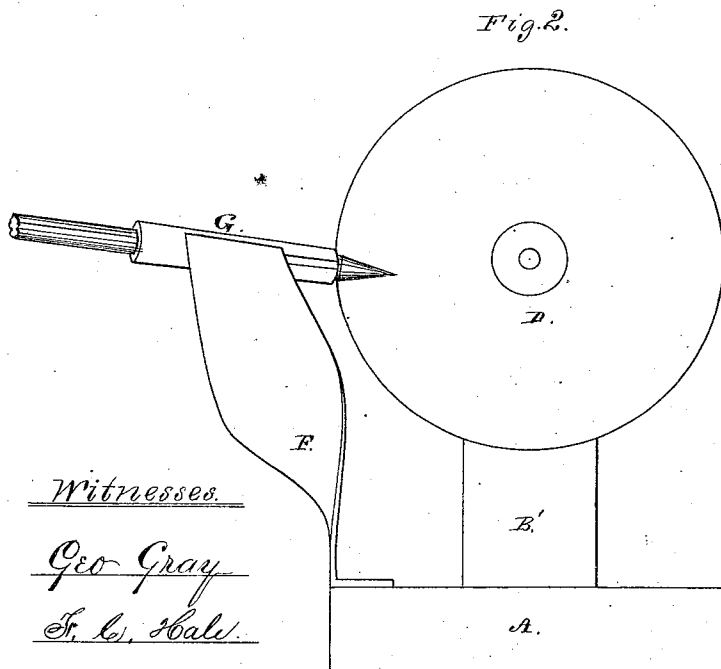
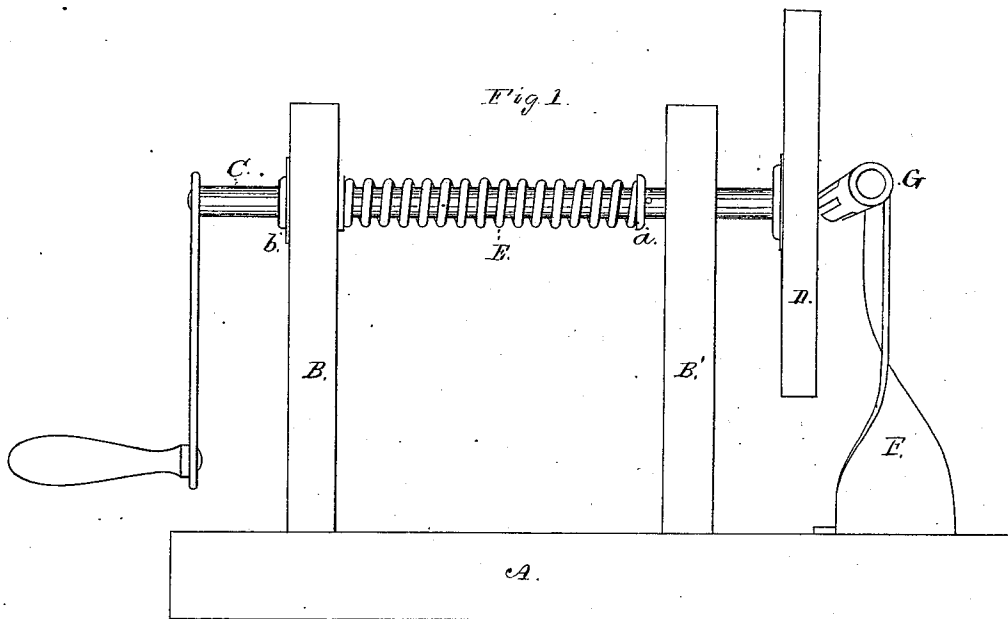


G. W. CHOATE.
Slate-Pencil Sharpener.

No. 161,862.

Patented April 13, 1875.



Witnesses.

Geo Gray

J. L. Hale

Geo. W. Choate

by his attorney

A. P. Hale

UNITED STATES PATENT OFFICE.

GEORGE W. CHOATE, OF NEWTON CENTRE, ASSIGNOR TO HIMSELF AND
JOHN M. CLINCH, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SLATE-PENCIL SHARPENERS.

Specification forming part of Letters Patent No. 161,862, dated April 13, 1875; application filed
February 5, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. CHOATE, of Newton Centre, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Slate-Pencil Sharpeners; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing and to the letters of reference marked thereon, which form a part of this specification.

In the said drawing, Figure 1 is a side elevation, and Fig. 2 an end view, of an apparatus for pointing or sharpening slate-pencils, constructed in accordance with my invention.

The object of my invention is to provide a simple and effective apparatus for pointing or sharpening slate-pencils; and consists in the peculiar construction and arrangement of the several parts, as hereinafter referred to and claimed.

In the drawing, A denotes the base of the apparatus; B B', two standards, projecting up therefrom. C is a cranked shaft, which extends through the standards, and has its journals supported in boxes therein, as shown in Fig. 1, such shaft being so applied as to be capable of a slight endwise movement. This shaft carries upon one of its ends an abrading or emery wheel, D. E is a spring, which is coiled around the shaft C, one end thereof resting against a collar, *a*, secured to the shaft, its other end bearing against the inner face of the standard B. *b* is another collar secured to the shaft C, and resting against the outer face of the box or bearing of the standard B. F is an arm, which extends up from the base A, and carries upon its upper end a short tube, G, whose inner end is furcated or formed with spring-arms, such arms having such tension that, while they support and hold the pencil, allow at the same time of its rotation therein. This tube or pencil-holder is disposed at an angle to the outer or abrading face of the wheel D, such angle correspond-

ing to the bevel which it is desirable to give to the point of the pencil; the shorter the bevel the greater the angle.

By the application of the spring to the shaft, as described, the wheel is caused to maintain a yielding pressure on the pencil, so as to enable a blunt end of the latter, when extended through its guide or holder, to impinge against the side of the abrading-wheel without offering too great a resistance to the rotation of the latter, while, as the pencil becomes worn away, the stress of the spring maintains the wheel in continued impact therewith until the pointing of the pencil is completed.

The abrading-face of the wheel D I prefer to arrange so as not to stand at a right angle with the axis of the shaft, but at a slight inclination thereto.

The apparatus, when in use, is to be clamped to a table or other suitable support.

In pointing a pencil in my approved apparatus, a person, with one of his hands, introduces one end of the pencil into the holder, and pushes it through the same until it impinges against the side of the wheel, at the same time turning the pencil, so as to evenly reduce it on all sides, while with his other hand he grasps the crank of the driving-shaft, and imparts any desirable rotation thereto.

Having described my invention, what I claim is—

The above-described device for sharpening slate-pencils, consisting, essentially, of the tubular furcated spring-holder G, the cranked shaft C, wheel D, and coiled spring E, the whole being constructed, combined, and arranged together in manner as shown and described.

In testimony that I claim the foregoing as my own invention I affix my signature in presence of two witnesses.

GEO. W. CHOATE.

Witnesses:

F. P. HALE,
F. C. HALE.