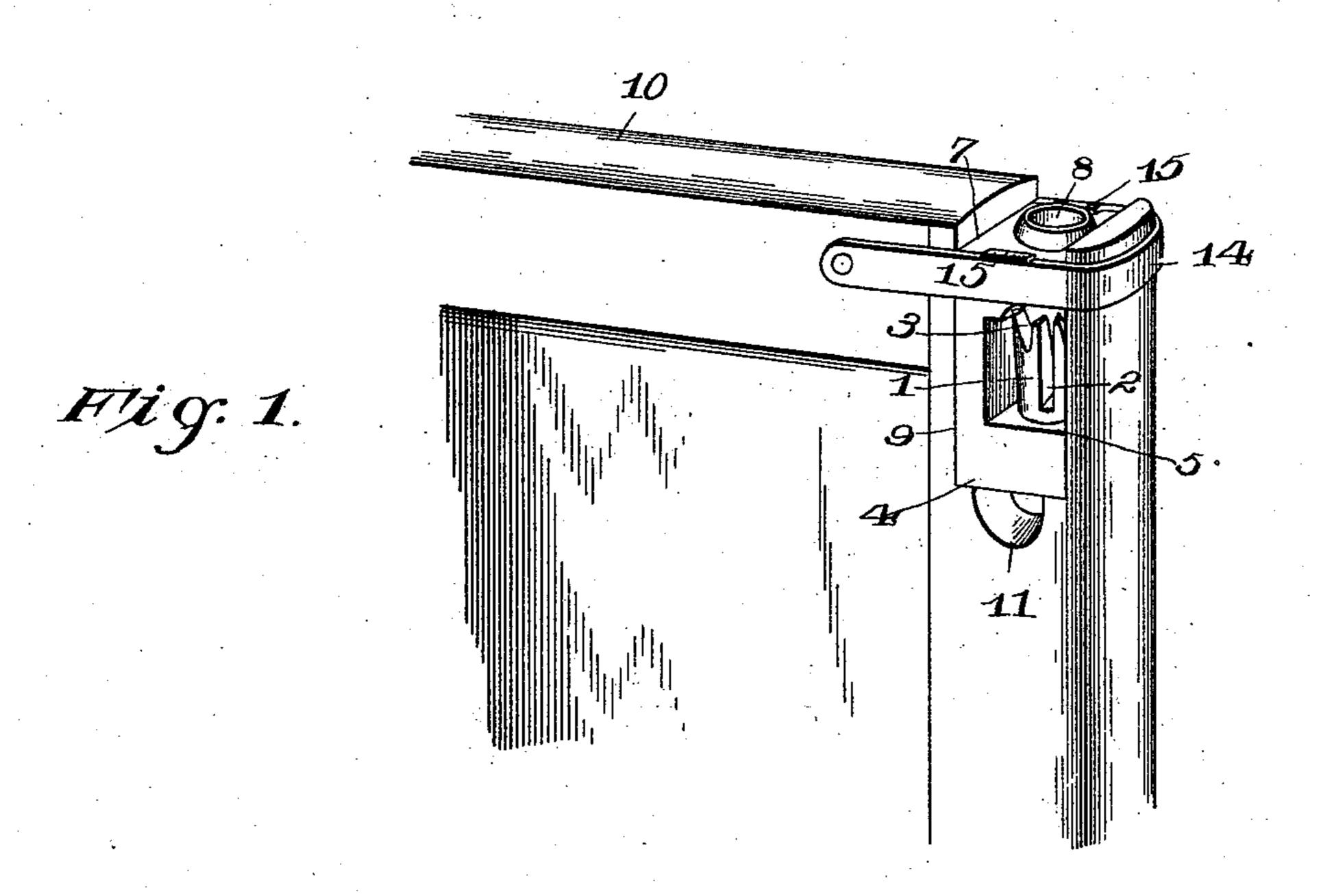
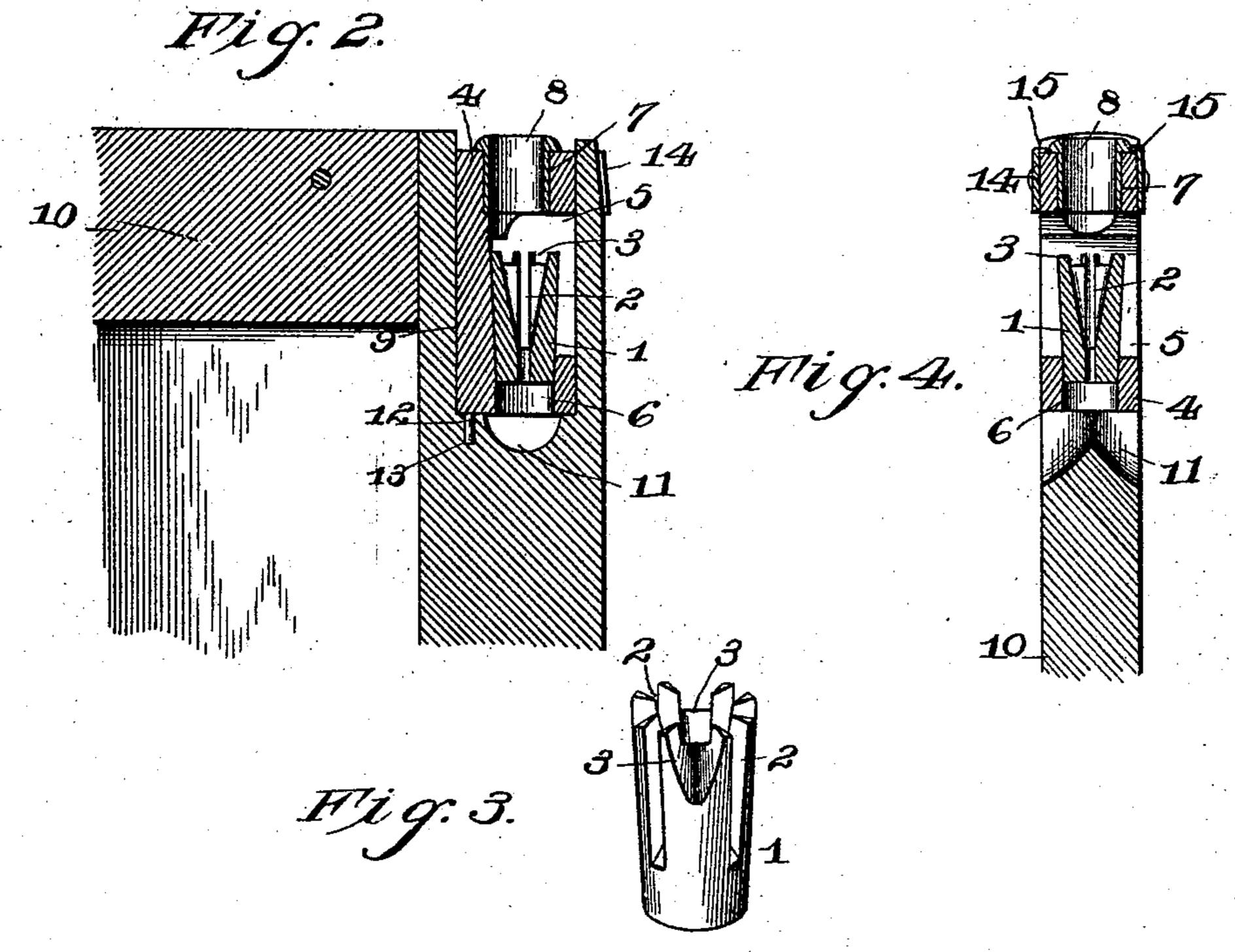
(No Model.)

A. WERNER. PENCIL SHARPENER.

No. 517,784.

Patented Apr. 3, 1894.





Inventor

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United States Patent Office.

AUGUST WERNER, OF PIOCHE, NEVADA, ASSIGNOR OF TWO-FIFTHS TO THOMAS J. OSBORNE, OF SAME PLACE.

PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 517,784, dated April 3, 1894.

Application filed July 18, 1893. Serial No. 480,864. (No model.)

To all whom it may concern:

Be it known that I, AUGUST WERNER, a citizen of the United States, residing at Pioche, in the county of Lincoln and State of Nevada, have invented a new and useful Pencil-Sharpener, of which the following is a specification.

Thé invention relates to improvements in

pencil sharpeners.

The object of the present invention is to provide a simple and in expensive pencil sharpener, which may be readily applied to a slate frame, which will enable slate pencils to be readily pointed or sharpened without noise or inconvenience to the user.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed

out in the claims hereto appended.

view of a portion of a slate provided with a pencil sharpener constructed in accordance with this invention. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the cutter. Fig. 4 is a transverse sectional view of the slate pencil sharpener.

Like numerals of reference indicate corresponding parts in all the figures of the draw-

30 ings.

1 designates a tubular cylindrical cutter, constructed of steel and provided with a tapering bore to receive the end of a slate pencil to be pointed or sharpened, and provided 35 with vertical slots 2 and flared grooves or recesses 3, which form interior cutting edges for reducing and sharpening a pencil. The slots 2 extend nearly the entire length of the cutter, and the grooves or recesses are arranged 40 at the top of the cutter between the slots 2. The cutter is arranged in a holder 4 provided with a longitudinal bore, which is intersected by a recess 5 receiving the cutter; the lower end of the latter is fitted in the lower portion 6 of the bore of the holder, and the upper portion 7 of the bore is provided with a slate pencil guiding bushing 8. The bushing 8 has its upper edge rounded and provided with au annular shoulder, which rests upon the upper 50 face of the holder; and it is adapted to re-

ceive and guide a slate pencil to the cutter. The holder 4 is detachably secured in an opening 9 at one of the upper corners of a slate frame 10, which is provided at the lower end of the opening 9 with beveled recesses 11 to 55 direct the pencil dust outside the opening 9 and to prevent the same from collecting around the sharpener. The lower end of the holder is provided with a depending projection 12, which fits in a socket or indentation 13 of the 60 slate frame; and the holder is secured in the opening 9 by a swinging bail or loop 14. The socket or indentation 13 is arranged at the bottom of the opening 9 of the slate frame, and the swinging loop is hinged at the inner 65 side of the opening, and is adapted to swing over the adjacent side edge of the slate frame, and it is provided at its upper edges with inwardly extending lugs 15 to engage the upper face of the holder at opposite sides thereof to 70 retain the holder in the opening 9.

The slate pencil sharpener may be removed from the slate frame and used independently thereof; and it will be seen that it is simple and comparatively inexpensive in construction, that it is compactly and securely mounted on the slate frame, and that it will enable pencils to be conveniently and noiselessly

sharpened.

· Changes in the form, proportion and the 80 minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. A pencil sharpener comprising a holder having a longitudinal bore and provided with a recess intersecting and dividing the bore into upper and lower portions, the upper portion being adapted to receive a pencil, and a 90 tubular cutter detachably arranged in the recess and fitted in the lower portion of the bore and provided on its interior with cutting edges, substantially as described.

2. A pencil sharpener comprising a holder 95 having a longitudinal bore and provided with a recess intersecting the bore, a pencil guiding bushing fitted in the upper portion of the bore and having a shoulder resting upon the upper face of the holder, and a tubular cut- 100

ter arranged within the recess and fitted in the lower portion of the bore, substantially as described.

3. A pencil sharpener comprising a holder having a longitudinal bore and provided with a recess intersecting the bore, and a tubular cutterarranged in the recess and fitted in the lower portion of the bore and provided with a tapering bore and having vertical slots and flared grooves forming interior cutting edges, the slots extending nearly the entire length of the

slots extending nearly the entire length of the bore and the grooves being arranged at the top of the cutter between the slots, substantially as described.

4. The combination of a slate frame provided at the top with an opening, a removable holder arranged within the opening and provided with a longitudinal bore, a tubular cutter carried by the holder, and a swinging loop

20 hinged to the slate frame at the inner side of the opening and adapted to fit over the adjacent side edge of the slate frame and extending on opposite sides of the holder, substantially as described.

of a slate frame provided at its top with an opening and having a socket at the bottom thereof, a holder removably mounted in the opening of the slate frame

and provided with a depending projection engaging the socket thereof, a swinging loop 30 hinged to the slate frame and provided with inwardly extending lugs engaging the holder, and a cutter carried by the holder, substantially as described.

6. The combination of a slate frame provided at its top at one side with an opening and having at the bottom thereof a socket and provided at opposite sides of the opening at the lower end thereof with beveled recesses, a holder having a longitudinal bore and provided with a recess and having a depending projection engaging the socket of the slate frame, a cutter arranged within the recess of the holder and fitted in the lower portion of the bore, and a swinging loop hinged to the 45 slate frame and provided at opposite sides with lugs engaging the holder, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 50 the presence of two witnesses.

AUGUST WERNER.

Witnesses:

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N. P. DOOLEY, J. A. CLARK.