

Aug. 15, 1939.

W. F. WELLS

2,169,908

PENCIL SHARPENER

Filed Dec. 19, 1938

Fig. 1

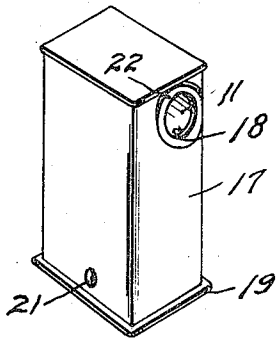


Fig. 4

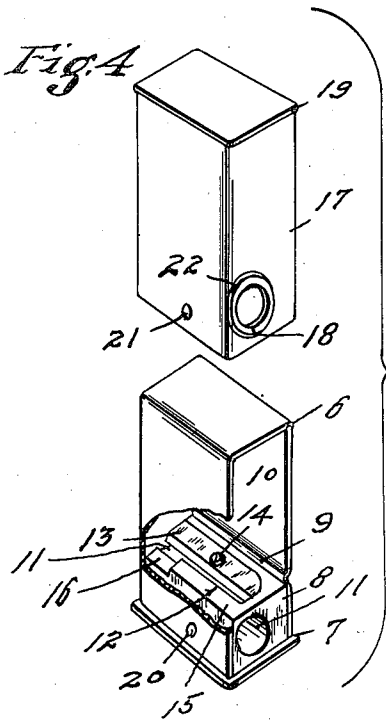


Fig. 5

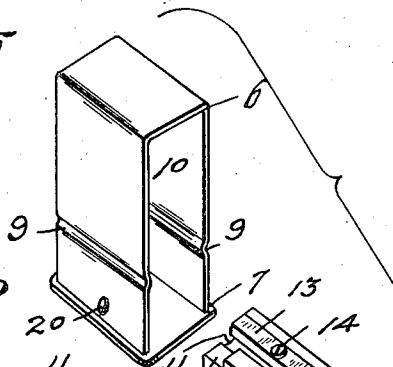


Fig. 2

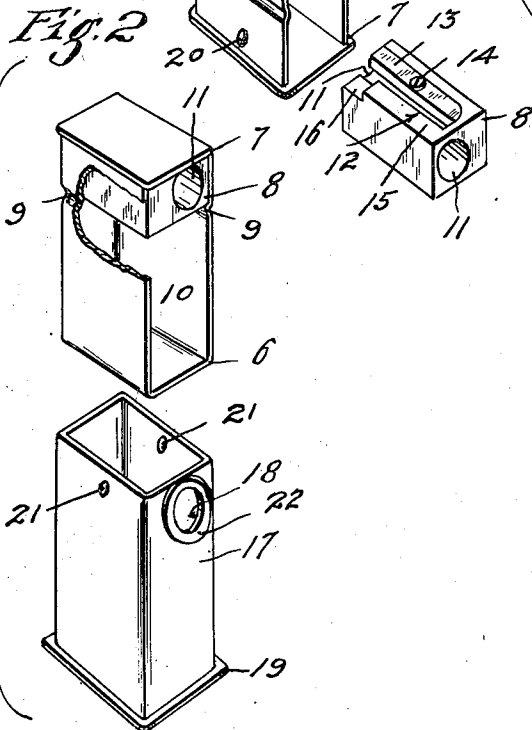
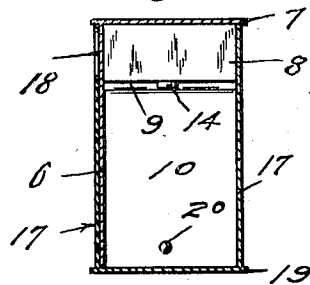


Fig. 3



Inventor  
William F. Wells  
By his Attorneys  
Kilgore and Kilgore

# UNITED STATES PATENT OFFICE

2,169,908

## PENCIL SHARPENER

William F. Wells, Minneapolis, Minn.

Application December 19, 1938, Serial No. 247,786

8 Claims. (Cl. 120-93)

My present invention has for its object to provide an extremely simple and highly efficient pencil sharpener.

The improved pencil sharpener, which is intended for general use, is especially well adapted for the use by school children or other students. This pencil sharpener is of such size that it can be carried in a pocket, a purse, a brief case, or the like. Said pencil sharpener includes a receptacle having in its upper end portion a sharpener unit, and below said unit a compartment into which shavings and lead are precipitated as they are cut from a pencil being sharpened. This pencil sharpener also includes a capping cover for the receptacle having a passageway for a pencil while being sharpened. When the pencil sharpener is not in use the cover may be placed over the receptacle in reverse position so that the pencil passageway is closed by the back member of the receptacle thereby completely closing the receptacle and preventing the shavings and lead in the compartment from being spilled therefrom. Said cover when applied to the receptacle in reverse position also prevents dirt and other foreign matter from entering the conical pass.

To the above end, generally stated, the invention consists of the novel construction and arrangement of parts.

In the accompanying drawing, which illustrates the invention, like characters indicate like parts throughout the several views.

Referring to the drawing;

Fig. 1 is a perspective view of the improved pencil sharpener;

Fig. 2 is a view corresponding to Fig. 1, but showing the receptacle and cover separated, some parts being broken away;

Fig. 3 is a view of the improved pencil sharpener in central vertical section, with the cover in a reverse position from that shown in Fig. 1;

Fig. 4 is a view corresponding to Fig. 2 with the exception that the parts are shown turned end for end; and

Fig. 5 is a perspective view of the receptacle as shown in Fig. 4 with the sharpener unit removed therefrom.

The numeral 6 indicates a rectangular receptacle having an open face. As shown, the top member of the receptacle 6 is extended outwardly of the body of said receptacle to afford a flange 7.

A sharpener unit is removably mounted in the receptacle 6, at the top thereof or upper end portion and includes a block 8 that completely fills the respective end portion of said receptacle.

Said block 8, at its bottom or under side, slidably rests on a pair of ribs 9, on the side members of said receptacle 6 and is frictionally held in place with freedom for endwise removal through the open face of the receptacle 6. The space in the receptacle 6 below the block 8 affords a compartment 10.

The block 8 is provided with a conical pencil receiving passageway 11 that extends longitudinally of said block from the front end thereof. In the under side of the block 8 is a longitudinal slot 12 that extends into the conical passageway 11. A knife blade 13 is rigidly but removably secured to the under side of the block 8 by means of a screw 14. This knife blade 13 has a sharp cutting edge which projects slightly into the slot 12 and is positioned to cut a pencil when the same is inserted into the conical passageway 11 and rotated in the proper direction. Formed with the block 8 is a flange 15 which extends parallel to the cutting edge of the knife blade 13 and is spaced slightly therefrom. This flange 15 terminates slightly from the inner end of the knife blade 14 and thereby forms a clearance notch or depression at one side and extending above the conical surface of the passageway 11.

Lead cut or broken from a pencil while being sharpened enters the notch 16 and is precipitated therefrom into the compartment 10.

The improved pencil sharpener further includes a rectangular cover 17 that is telescoped onto the receptacle 6 from the lower end thereof. This cover 17 completely caps the receptacle 6 and encloses the same except for a pencil passageway 18 in said covering that is in registration with the outer end of the conical passageway 11 and forms a section or extension thereof. When this cover 17 is applied to the receptacle 6 its upper end engages the flange 7 as a stop. The bottom of the cover 17 is extended outwardly of the main body of said cover and affords a flange 19.

To frictionally hold the cover 17 in position on the receptacle 6 and a small bead 20 is pressed from one side of the receptacle 6 and arranged to enter either one of two depressions 21 pressed in the sides of the cover 17.

When the pencil sharpener is not in use, the cover 17 is telescoped onto the receptacle 6 in reverse position, whereby the pencil passageway 18 is closed by the back member of said receptacle to thereby completely close said receptacle to prevent shavings and lead therein from being spilled therefrom. The reverse application of the cover 17 to the receptacle 6 also prevents dirt or other foreign matter from entering the conical passageway 18.

The flat sides of the pencil sharpener permit said sharpener to be easily and securely held in the hand while sharpening a pencil and the flanges 7 and 19 afford good gripping surfaces when removing the cover 17 from the receptacle 6.

From the above description it is evident that when a pencil is to be sharpened, the cover 17, if positioned as shown in Fig. 3, must be removed from the receptacle 6 and replaced to bring the passageway 18 in registration with the conical passageway 11 and said pencil inserted into the passageways 11 and 18 and rotated in the proper direction relative to the knife blade 13, to produce cutting action. Shavings and lead cut from the pencil will be precipitated into the compartment 10 the open face of which is closed by the cover 17. As heretofore stated, lead cut from the pencil, and broken pieces of lead will drop through the notch 16 and be precipitated into the compartment 10 thus preventing the lead from coming into contact with the wood portion of the pencil so that the same will come out of the sharpener clean and free from lead marks.

From time to time the cover 17 may be removed from the receptacle 6 and the shavings and lead in the compartment 10 removed therefrom or the shavings and lead in the receptacle 6 may be emptied from the compartment 10 after a pencil has been sharpened and the cover 17 removed from the receptacle to be replaced thereon to bring its passageway 18 into a position to be closed by the back member of the receptacle 6.

On the outer face of the cover 17 is a boss 22 provided to increase the bearing surface of a pencil inserted through the passageway 18 and thereby hold the same in true alignment with said passageway and prevent wobble movement thereof so that the knife 13 will cut a true conical point on the pencil, also to prevent the breaking of the lead.

Obviously, the improved pencil sharpener may be manufactured and sold at a small cost.

What I claim is:

1. A pencil sharpener comprising a receptacle having an open face, a sharpener unit in the upper

end portion of the receptacle, said receptacle having a compartment below the sharpener unit, said unit comprising a block having a conical bore the pencil receiving end of which is in said open face, a slot in the under side of the block and extending into said conical bore, and a cutting blade the cutting edge of which is in said slot, and a cover capping the receptacle and normally closing the open face thereof.

2. The structure defined in claim 1 in which the cover is provided with a pencil bore in registration with the conical bore.

3. The structure defined in claim 1 in which the sharpener unit is removable from the receptacle through the open face thereof.

4. The structure defined in claim 1 in which the receptacle is provided with ribs on which the sharpener unit is slidably mounted for removal from the receptacle through the open face thereof.

5. The structure defined in claim 1 in which the cover is provided with a pencil bore, and in which said cover may be reversibly applied to the receptacle to position its pencil bore either in registration with the conical bore or at the back of the receptacle where the same is closed thereby.

6. The structure defined in claim 1 in which the block has on its under side at the inner end of the conical bore, a lead escape notch.

7. A pencil sharpener comprising a receptacle having an open face, a sharpener unit in the upper end portion of the receptacle, said receptacle having a compartment below the sharpener unit, said unit comprising a block having a conical bore, the pencil receiving end of which is in said open face, a slot in the under side of the block and extending into said bore, and a cutting blade, the cutting edge of which is in said slot, and a closure for the open face of the receptacle, said closure being independently movable in respect to the sharpening unit.

8. The structure defined in claim 1 in which the cover is provided with a pencil bore in registration with the conical bore and a boss on the cover surrounding said bore.

WILLIAM F. WELLS.