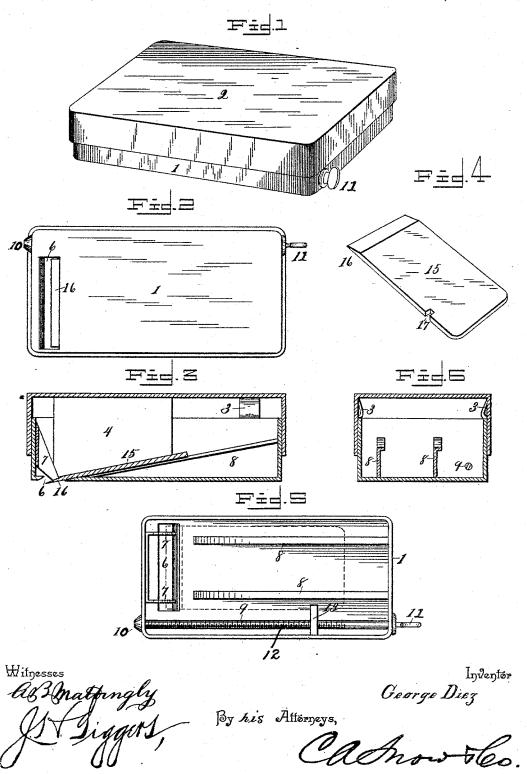
G. DIEZ. PENCIL SHARPENER.

No. 490,272.

Patented Jan. 24, 1893.



UNITED STATES PATENT OFFICE.

GEORGE DIEZ, OF SANTA CLARA, CALIFORNIA.

PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 490,272, dated January 24, 1893.

Application filed November 5, 1892. Serial No. 451,075. (No model.)

To all whom it may concern:

Be it known that I, GEORGE DIEZ, a citizen of the United States, residing at Santa Clara, in the county of Santa Clara and State of 5 California, have invented a new and useful Pencil-Sharpener, of which the following is a

specification.

My invention relates to improvements in pencil-sharpeners; the objects in view being to to provide a cheap and handy device that may be readily manipulated to bring to the proper point or bevel the ends of lead-pencils; to provide means for adjusting the cutting device; and finally, to provide means for pre-15 venting the scattering of the particles of lead and shavings of wood over the floor, desk or clothes, of the operator.

With these and other objects in view, the invention consists in certain features of con-20 struction hereinafter specified and particu-

larly pointed out in the claims.

Referring to the drawings:-Figure 1 is a perspective view of a pencil-sharpener embodying my invention. Fig. 2 is a detail plan-view. Fig. 3 is a longitudinal sectionalview. Fig. 4 is a detail in perspective of the cutter or blade. Fig. 5 is a plan of the receptacle. Fig. 6 is a transverse-section.

Like numerals of reference indicate like 30 parts in all the figures of the drawings.

In practicing my invention, I employ an oblong box or receptacle 1, formed of sheetmetal, and provided with a removable snuglyfitting cover 2, which latter has one of its 35 side-walls near its top provided with a pair of clips 3, and its top at the opposite side thereof adjacent to this side wall provided with a depending flange 4, whose lower edge is beveled and projects beyond the lower edge 40 of the side-wall and therefore into the box or receptacle.

The box or receptacle has its bottom adjacent to one end provided with a transverse slot 6, and above the same with a pair of 45 rearwardly-disposed inclined lugs 7 that project over the slot. In rear of the slot a pair of inclined ways 8, are located upon the bottom within the receptacle and lead from the back-wall thereof to a point adjacent to the

50 slot.

A pair of bearing-openings are formed in front and rear walls of the receptacle to one I bevel may be made much longer than if said

side of the ways 8, and at one side of the slot 6, and in these bearings there is mounted for rotation a rod 9, which beyond the front-wall 55 of the receptacle has a head 10, and in rear of the rear-wall is provided with a button 11, by means of which the rod may be rotated. Between its ends the rod is screw-threaded, as indicated at 12, and the same passes 60 through a block 13, which is perforated and threaded for the reception of the rod, whereby when the rod is rotated in one direction the block is fed forward, and when rotated in the opposite direction, it is fed to the rear. 65

Supported upon the inclined ways 8 is a cutting-blade 15, and the same is of such width as to adapt its front beveled cuttingend 16, to take through and extend a slight distance beyond the transverse slot 6 formed 70 in the bottom of the receptacle. This blade at that side thereof adjacent to the threadedrod has a notch 17, and the same receives and interlocks with the aforesaid block 13 so that any movement of the block caused by the ro- 75 tations of the threaded-rod will cause a similar movement upon the part of the blade, and in this manner said blade may be readily adjusted into and out of the slot 6.

This completes the construction of the de- 80 vice, and the operation of the same may be briefly stated as follows: The blade having been placed in position, the same is adjusted until its lower edge extends a suitable distance through the slot 6. The cover being in 85 position the clips bear against the inner sides of the side-walls of the box, thus maintaining the cover in position thereon, and the depending flange, having the lower beveled edge, rests upon the blade, thus maintaining it upon 90 its ways and preventing it rising so as to disconnect from the block. The blade having been adjusted, the pencil is passed forward under the point so as to support the same, after which the remaining hand is employed 95 to manipulate the sharpener. The sharpener is manipulated much after the fashion of a plane; that is, it is reciprocated back and forth over the end of the pencil and is held at such an angle thereto as to give to said 100 pencil the requisite bevel. That is to say, by holding the sharpener nearly parallel to the pencil or at an acute angle to the same, the

pencil was held at a greater angle. It will be seen that the particles of lead and shavings pared from the pencil pass out through the slot 6 into the receptacle where they are 5 stored, and whereby they are prevented from becoming scattered over the floor, the clothes of the operator, or the desk. At intervals, the cover of the receptacle may be removed and the latter inverted so as to deposit the contents in the waste-basket, or other receptacle.

It is intended to construct the device of lightsheet-metal, either nickeled or japanned, and suitably ornamented; and when completed it will be found not only a useful compendium to the desk, but also ornamental.

Having described my invention, what I

claim is:-

1. In a pencil-sharpener, the combination with a receptacle provided near one end with a transverse slot and in rear of the same with ways, of a removable cover for the receptacle, a blade mounted for sliding on the ways and having its front end beveled to a cutting-25 edge, and means for adjusting the blade upon the ways and its edge through the slot, substantially as specified.

2. In a pencil-sharpener, the combination with a receptacle provided near its front end 30 with a slot, inclined ways mounted in the receptacle in rear of the slot, a blade mounted loosely on the ways, means for adjusting the blade, and a cover removably mounted on the receptacle and provided with an internal de35 pending flange having the lower inclined edge

agreeing with the ways and located over the blade, substantially as specified.

3. In a pencil sharpener, the combination with the oblong receptacle provided at one end upon its bottom with a transverse slot, to inclined ways in rear of the slot, a blade mounted on the ways adapted to be projected through the slot and provided at one side of the ways with a notch, bearing-openings in the front and rear ends of the receptacle, a tod journaled in the bearing-openings and provided in rear of the same with a head, threads formed on the rod between its ends, a block perforated and threaded to loosely receive the rod and engaged with the notch of the blade, of a cover removably mounted on the receptacle, substantially as specified.

4. In a pencil sharpener, the combination with the oblong receptacle provided at its front end in its bottom with a transverse slot, 55 in rear of the same with inclined ways, and a cover for the receptacle, of a blade mounted on the inclined ways, an adjusting-rod located at one side of the blade, and a loose block threaded on the adjusting-rod and connected with the blade, substantially as speci-

fied.

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

GEORGE DIEZ.

Witnesses:

C. W. WERNER, J. A. LOWELL.