C. F. HESS.
PENCIL SHARPENER.

(Application filed May 19, 1900.) (No Modei.) Invertor:

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## UNITED STATES PATENT OFFICE.

## CLARKE F. HESS, OF FERNWOOD, PENNSYLVANIA.

## PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 662,788, dated November 27, 1900.

Application filed May 19, 1900. Serial No. 17,261. (No model.)

To all whom it may concern.

Be it known that I, CLARKE F. HESS, a citizen of the United States, residing at Fernwood, Delaware county, Pennsylvania, have 5 invented certain Improvements in Pencil-Sharpeners, of which the following is a specification.

My invention consists of an improved pencil-sharpener provided with a pivoted knife to and adapted to be carried and operated by one hand of the user.

My invention further consists of a special

form of frame for the sharpener, whereby I am enabled to cheapen the cost of manufacture and produce a device of greater utility than heretofore.

My invention is fully illustrated in the ac-

companying drawings, in which—

Figure 1 is a perspective view of my im-20 proved pencil-sharpener, showing the manner in which the same is operated to sharpen a pencil. Fig. 2 is a plan view of my improved pencil-sharpener. Fig. 3 is a sectional view on the line a a, Fig. 2; and Fig. 4 is a view 2; in elevation of my pencil-sharpener, showing modifications of details of the same.

The main object of my invention is to provide a pencil-sharpener that will be easy of operation and accomplish the desired result 30 and which may be carried and operated by one hand of the user, the pencil being held by the other hand in the proper position to be sharpened, a further object of my invention being to produce a pencil-sharpener as

35 cheaply as possible.

In carrying out my invention I make the frame of the pencil-sharpener from a single piece of sheet metal. This frame has a portion 1, adapted to fit over the thumb of the 40 right hand of the user, and a funnel-shaped casing 2 for the insertion of the pencil. This funnel-shaped casing is provided with a slot 3, through which a portion of the pencil may project to be cut off by the knife 4, said knife 45 4 being pivoted to the flat portion 5 of the frame at 6. The knife 4 is provided with the cutting edge 7, as clearly shown in Figs. 1 and 2, this edge serving to shave or cut away the portion of the pencil projecting through 50 the slot 3 of the casing 2.

As before noted, the portion 1 of the frame is adapted to be carried by the thumb of the |

right hand of the user, and, as shown in Fig. 1, the knife may be moved by the forefinger of this hand. To enable this action to be 55 readily accomplished, the knife is provided with a handle 8, having an open or concaved portion 9 to receive the end of the forefinger, whereby proper leverage may be maintained. As the knife is simply pivoted to the frame, 60 it may be swung entirely free of the same when it is desired to sharpen the knife.

The portion 1 of the frame adapted to fit over the thumb of the user is free at one portion, as shown in Figs. 2 and 3, so that it may 65 be enlarged or contracted in diameter to accommodate the different-sized thumbs of the

users.

In some instances I may form with the frame a guide 10 for the knife—such, for in-70 stance, as is shown by dotted lines in Fig. 1 which guide serves also as a stop to limit the movement of the knife during the cutting operation. The guide is not essential, however; but I find that it is desirable to limit 75 the movement of the knife, and for this purpose I prefer to turn up a portion of the metal frame to form a stop 11, as clearly shown in

Figs. 1 and 2.

I prefer to form the frame of my pencil- 80 sharpener from a single piece of sheet metal, a cross-section of such frame being clearly shown in Fig. 3. It will be noticed in forming the frame from a single piece of sheet metal that I provide the portions 1 and 2 in 85 close contact with each other, and in order to lock these portions together and prevent the flat portion of the frame from separating the short bends are brought to a sharp edge and in contact with each other, as shown at 12 in 90 Fig. 3. This arrangement will serve to lock these parts of the frame in place; but as an additional precaution solder may be run between the flat bends of the frame. Thus the flat portion 5 will be stiffened, providing a 95 firm support for the knife.

By making the pencil-sharpener as described herein and shown in the accompanying drawings I provide a neat compact article that will effectually serve the purpose for 100 which it has been designed and which is composed of few parts—in point of fact only three—viz., the frame, the knife, and the pivot-pin connecting the knife to the frame.

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

1. The combination in a pencil-sharpener, of the frame having an integral and flexible portion adapted to the thumb of the hand, and an integral part forming a receptacle for the pencil, said receptacle providing for the projection of a portion of the pencil, and a not knife pivoted at one end of the frame and serving to cut the pencil, said knife having a handle at the opposite end whereby it may be operated by the forefinger of the hand and being free to swing clear of the frame so that it may be sharpened when necessary, substantially as described.

2. In a pencil-sharpener, a frame having an integral and flexible portion adapted to the thumb of the hand, an integral portion to receive the pencil, said latter portion having a slot or opening through which the pencil may project, and a flat portion between the

thumb-piece and the pencil-receptacle, in combination with a knife pivoted to the flat portion of the frame and adapted to be moved 25 across said flat portion to cut the projecting part of the pencil, substantially as described.

3. The combination in a pencil-sharpener, of an approximately cylindrical and flexible receptacle adapted to receive the thumb of 30 the hand, a conical pencil-receptacle, a flat portion integral with and joining said receptacles, a knife pivoted to the flat portion of the frame and movable across the surface of the same, and a stop and guide for the knife 35 formed by a bent-up portion of said frame, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

CLARKE F. HESS.

Witnesses:
MURRAY C. BOYER,
Jos. H. KLEIN.