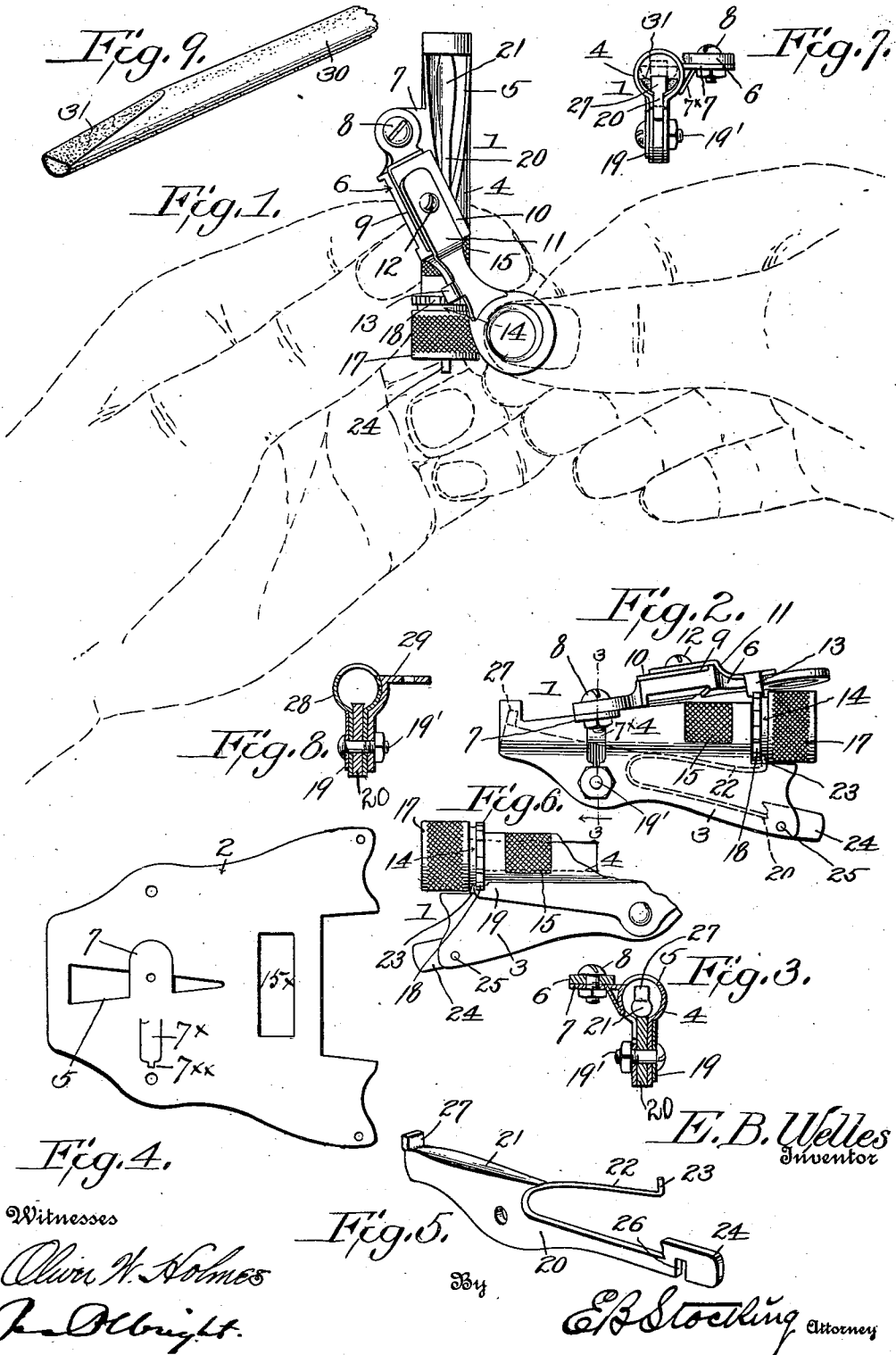


E. B. WELLES.
PENCIL SHARPENER.
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1,016,117.

Patented Jan. 30, 1912.



Witnesses

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Fig. 5.

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EDWARD B. WELLES, OF WINDSOR, CONNECTICUT.

PENCIL-SHARPENER.

1,016,117.

Specification of Letters Patent.

Patented Jan. 30, 1912.

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To all whom it may concern:

Be it known that I, EDWARD B. WELLES, a citizen of the United States, residing at Windsor, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Pencil-Sharpener, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to certain new and useful improvements upon pencil sharpeners, the object being to improve the general construction of the same and to provide the pencil-sharpener holder with a handle portion whereby the same may be readily grasped by the hand so as to hold the same firmly while the cutter is being operated with the other hand.

20 Another object of the invention is to provide means whereby the cutting blade may be sharpened by inserting a stick of carborundum within the holder, or any other sharpening stone, or the like, means being provided for allowing the sharpening stone to drop in the holder out of engagement with the blade when being moved forward so that when released, and the blade is moved backward, the edge will be brought into engagement with the sharpening stone in such a manner that the blade will be sharpened.

30 Another object of the invention is to provide a pencil sharpener in which the pencil holder is formed of a blank which may be readily bent to form the holder proper and handle in such a manner that the cost of manufacturing the holder is greatly reduced.

40 Another object of the invention is to provide a novel point support which is so mounted that the same may be readily operated by one finger of the hand holding the device whereby the point may be held under any desired tension.

45 Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

50 In the drawing—Figure 1 is a plan of my improved pencil sharpener showing the same held by the hand in position to be operated; Fig. 2 is a side elevation of the pencil sharpener; Fig. 3 is a section taken on line 3—3 of Fig. 2; Fig. 4 is a plan view of the blank from which the holder is formed; Fig. 5 is a perspective view of the point support detached; Fig. 6 is a detail side elevation

showing the spring pawl for holding the chuck from rotating in reverse direction; Fig. 7 is an end view of the pencil sharpener showing the point support in dotted lines in raised position; Fig. 8 is a detail section through a modified form showing a bracket attached for supporting the knife carrying lever; and Fig. 9 is a perspective view of a stick of carborundum or any other analogous material used for sharpening the blade.

Like numerals of reference refer to like parts in the several figures of the drawing.

70 In the drawing, 1 indicates a pencil holder which is formed of a blank 2, as clearly shown in Fig. 4, bent centrally into tubular form having depending parallel edges forming a handle 3, by means of which the holder may be readily supported. The tubular portion 4, formed by bending the blank as above described, is provided with a tapering aperture 5, over which a lever 6 is adapted to oscillate, said lever being pivotally mounted on a bracket 7 by a pivot bolt 8 and said bracket is formed integral with the blank by punching tongues outwardly therefrom, as clearly shown. The lever 6 is provided with a ring portion, as clearly shown, and a blade receiving portion 9, upon which is clamped a blade 10 by a plate 11 which is secured in position by a screw 12, said plate having an extension provided with a depending pawl 13 for a purpose later described.

90 The sleeve 4 of the holder 1 is cut away and revolubly mounted within said tubular holder and at the opposite end from the tapering opening is a chuck 14 of any suitable construction having a milled annular shoulder 15 which extends into the cut-out portion of the sleeve in such a manner that the chuck is held within the sleeve so that the same may freely rotate and at the same time will be prevented from moving longitudinally within the holder. The chuck is provided with dogs thrown into engagement with the pencil when placed within the chuck by a revoluble sleeve 17 in order to prevent the pencil from moving longitudinally within the chuck after being locked. In order to impart an intermittent rotary movement to the pencil between the shaving actions of the blade, the chuck is provided with a ratchet wheel 18 which is engaged by the pawl 13 of the blade carrying lever 6 in a manner similar to that disclosed in

former Patents Nos. 965,262 and 965,263. The ratchet wheel 18 is prevented from rotating in a reverse direction by a spring pawl 19 arranged on one side of the handle portion of the holder 1.

Pivotaly mounted between the depending parallel edges of the handle portion of the holder on a transverse bolt 19', is a point support 20, said bolt also securing the spring pawl 19 in position on the holder. The point support 20 is provided with a swaged concaved portion 21 to receive the point of the pencil so as to allow the point to yield as the blade is brought into engagement with the same. The pivoted point support 20 is in the form of a lever, as clearly shown, and carries a spring 22 for normally holding the point receiving portion 21 in the position shown by dotted lines in Fig. 2, the free end of said spring having an angle portion 23 which extends upwardly between the ratchet wheel 18 and sleeve 17. By this construction, the sleeve portion 15 of the chuck can be dispensed with, if desired, and the chuck will be held within the holder by the spring 22 in such a manner that it may be readily detached. The support 20 is provided with an outwardly projecting end portion 24 which extends beyond the end of the handle 3 in such a manner that the same may be readily forced upwardly by pressing upon the same in order to change the position of the support within the holder. The upward movement of the point receiving portion is limited by a pin 25 extending transversely through the handle 3 and a notch 26 formed in the support, as clearly shown, which limits the downward movement of that end of the holder. The point receiving portion of the support terminates in an upwardly projecting lug 27 which forms a stop for the pencil and also limits the movement of the support by coming into engagement with the end of the tube forming the holder. When a new pencil, to be sharpened, is inserted within the holder, the end of the same engages the stop 27 so that when the knife is oscillated to sharpen the same, the pencil will be cut away in such manner that the point will also be sharpened. In the modification shown in Fig. 8, a holder 28 is shown having a bracket 29 secured thereto which forms a support for the oscillating blade carrying lever.

When the blade becomes dull from use and it is desired to sharpen the same, a stick of carborundum 30 having a beveled grinding portion 31 is inserted within the holder 1 of the sharpener and the outer end of the lever forming the point support is pressed upwardly by one of the fingers so as to allow the blade carried by the lever to be swung over the tapering aperture and then by releasing the lever, the carborundum will be forced up in the holder in such position that

when the lever is swung backwardly, the blade will be drawn over the grinding portion, and it will be seen that by repeating this operation, the blade will be quickly sharpened.

The blank 2, as shown in Fig. 4, is provided with a tongue 7* terminating in a reduced projecting portion 7** adapted to fit within the opening of the bracket forming tongue 7 in order to stiffen and brace the bracket. It is clearly apparent that the opening 15* provides when the holder is formed from the blank, a recess in which the milled portion 15 of the chuck member operates.

Having described my invention and set forth its merits, what I claim and desire to secure by Letters Patent is—

1. In a pencil sharpener, a pencil holder, a blade movably mounted on said holder, and a pivoted yielding point support extending into said holder and mounted to move in a plane substantially at right angles to the plane of movement of said blade.

2. In a pencil sharpener, a holder, a chuck revolubly mounted in said holder, a spring actuated pivoted support extending into said holder, said support having an outwardly projecting end for moving the same out of the holder.

3. A pencil sharpener comprising a holder formed of a blank having a handle portion, a lever pivotaly mounted in said handle having a supporting portion extending into said holder, said lever carrying a spring for normally holding said support in said holder.

4. A pencil sharpener comprising a blank bent centrally to form a tubular holder having parallel edges to form a handle, said holder being provided with an elongated opening, a shaving blade movably mounted on said holder and a yielding support mounted in said handle normally held extended into said holder.

5. A pencil sharpener comprising a holder capable of receiving a sharpening member, and manually operated means for controlling the position of said sharpening member so as to throw the same into engagement with the cutting member of said holder on its return stroke only.

6. A pencil sharpener comprising a pencil holder having a handle, a laterally movable yielding point support mounted in said handle and extending into said holder, and stops for limiting the movement of said support.

7. In a pencil sharpener, a pencil holder comprising a tubular portion having an integral handle portion, a chuck revolubly mounted in said holder, a pivoted lever mounted in said handle having a point supporting end extending into said holder, a spring carried by said lever for holding said

point supporting member within said holder, the free end of said spring engaging said chuck for holding said chuck within said holder.

5 8. In a pencil sharpener, a holder comprising a tubular member having a handle, a laterally movable point supporting member extending into said holder, said member being provided with a concaved portion terminating in a stop, and a pivoted blade carried by said holder.

10 9. In a pencil sharpener, a pencil holder comprising a tubular member having a handle, a lever pivotally mounted in said handle having a point supporting portion, a spring for normally holding said point supporting portion within the holder, stops for limiting the movement of said point supporting portion, and a movable shaving blade carried by said holder.

15 10. In a pencil sharpener, a holder formed of a blank bent centrally to form a tubular portion having parallel edge portions forming a handle, said tubular portion being provided with an elongated opening, a chuck revolvably mounted in said tubular portion for holding the article to be acted upon, a lever pivotally mounted in said handle carrying a point supporting portion extending into said tubular portion, a spring for holding said point supporting portion in position to receive the member to be acted upon, a ratchet wheel carried by said chuck, a movable blade carrying a pawl for engaging said ratchet, and a spring pawl carried by the handle engaging said ratchet.

20 11. In a pencil sharpener, a holder formed from a blank bent to form a tubular portion and a handle portion, said holder being provided with a laterally projecting bracket, a movable knife carrying member mounted upon said bracket, and a spring actuated

lever mounted within the handle having a supporting portion extending within the holder.

45 12. A pencil sharpener comprising a holder formed of a sheet of metal bent to form a tubular portion and a handle portion, said tubular portion being provided with an opening, a movable shaving blade mounted upon said holder at one side of said opening, a lever pivotally mounted in the handle, said lever being provided with a concaved supporting portion terminating in a stop, and a spring carried by said lever for normally holding the supporting portion within the holder.

50 13. A pencil sharpener comprising a holder formed from a blank bent to form a tubular portion and parallel handle portions, a bolt extending transversely through said handle portion, a lever pivotally mounted on said bolt having a point supporting portion extending into the tubular portion, a spring for normally holding said point supporting portion therein, a chuck for holding the article to be acted upon against longitudinal movement, and a shaving blade movably mounted upon said holder adapted to rotate said chuck in one direction.

60 14. A pencil sharpener having its body formed of a blank provided with a longitudinal tapering opening and a transverse oblong opening, the end of said blank being notched, and oppositely disposed tongues punched from said blank to one side of its longitudinal center.

70 In testimony whereof I affix my signature in presence of two witnesses.

EDWARD B. WELLES.

Witnesses:

H. P. ALDEN,
R. ALBRIGHT.