

No. 847,363.

PATENTED MAR. 19, 1907.

J. E. PARRISH.
PENCIL SHARPENER.
APPLICATION FILED JUNE 23, 1906.

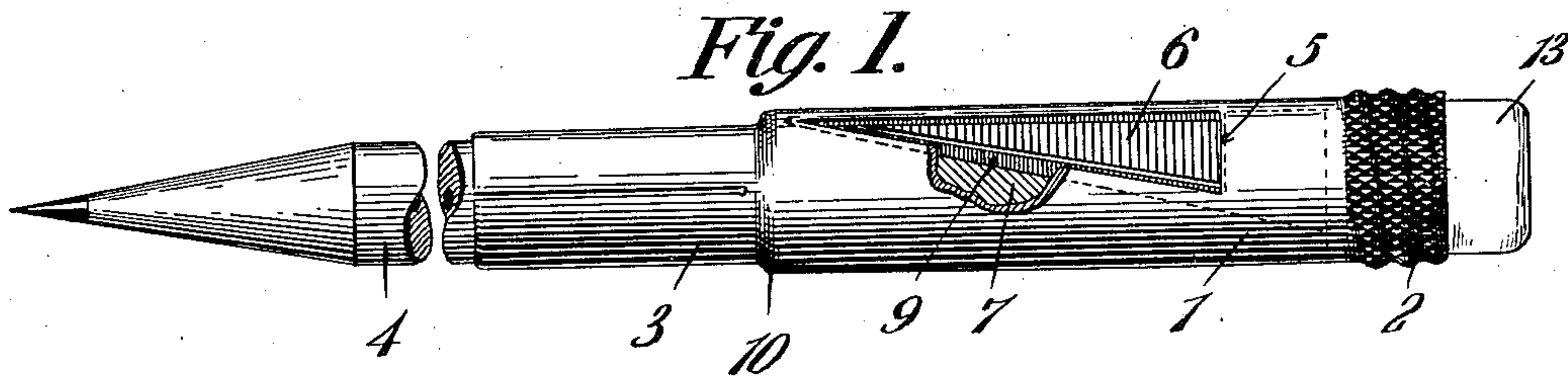


Fig. 3.

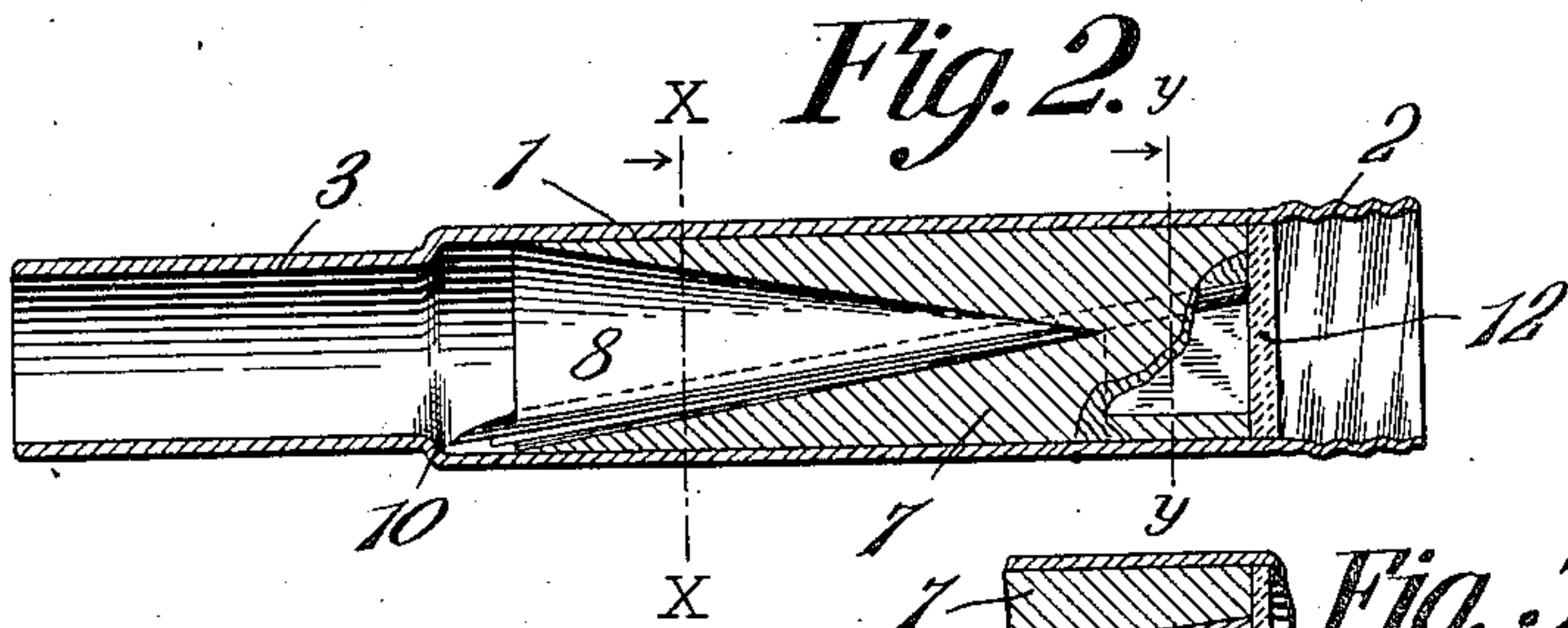
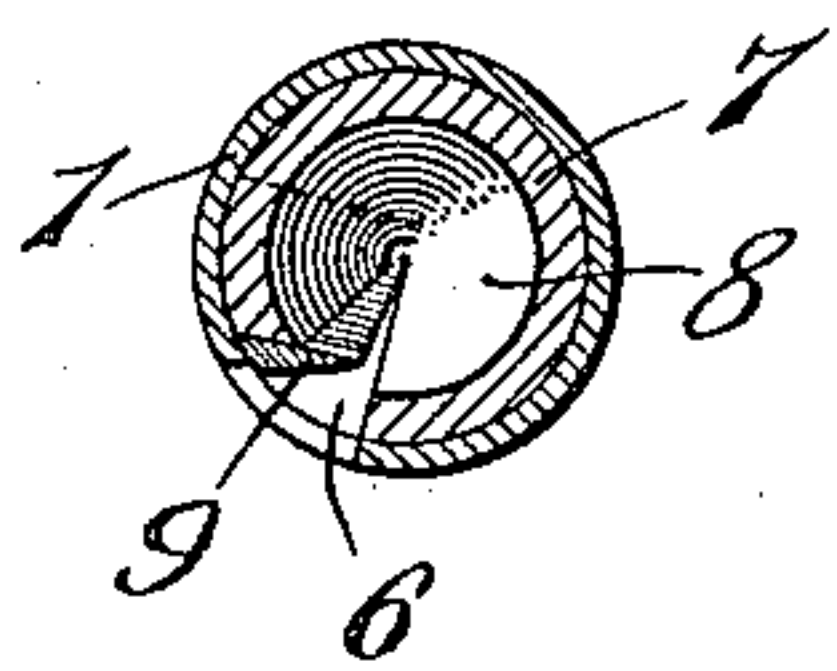


Fig. 4.

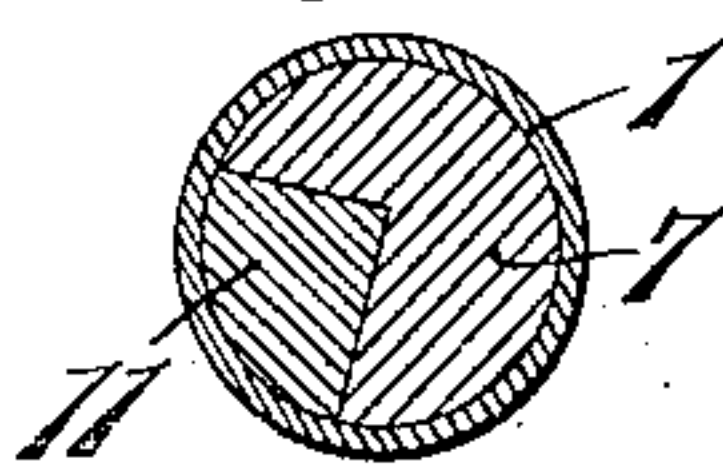


Fig. 7.

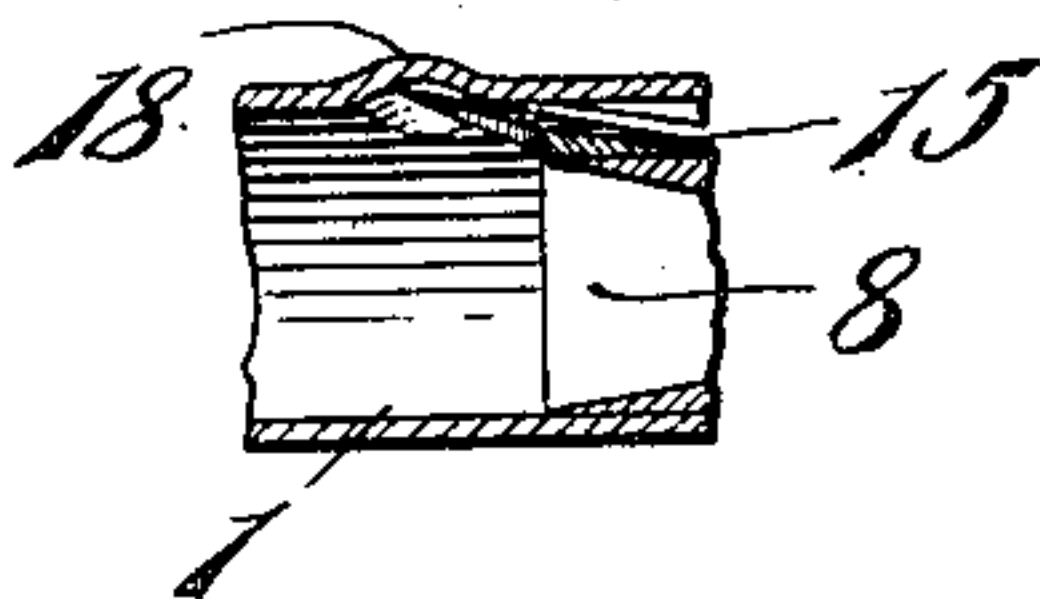


Fig. 6.

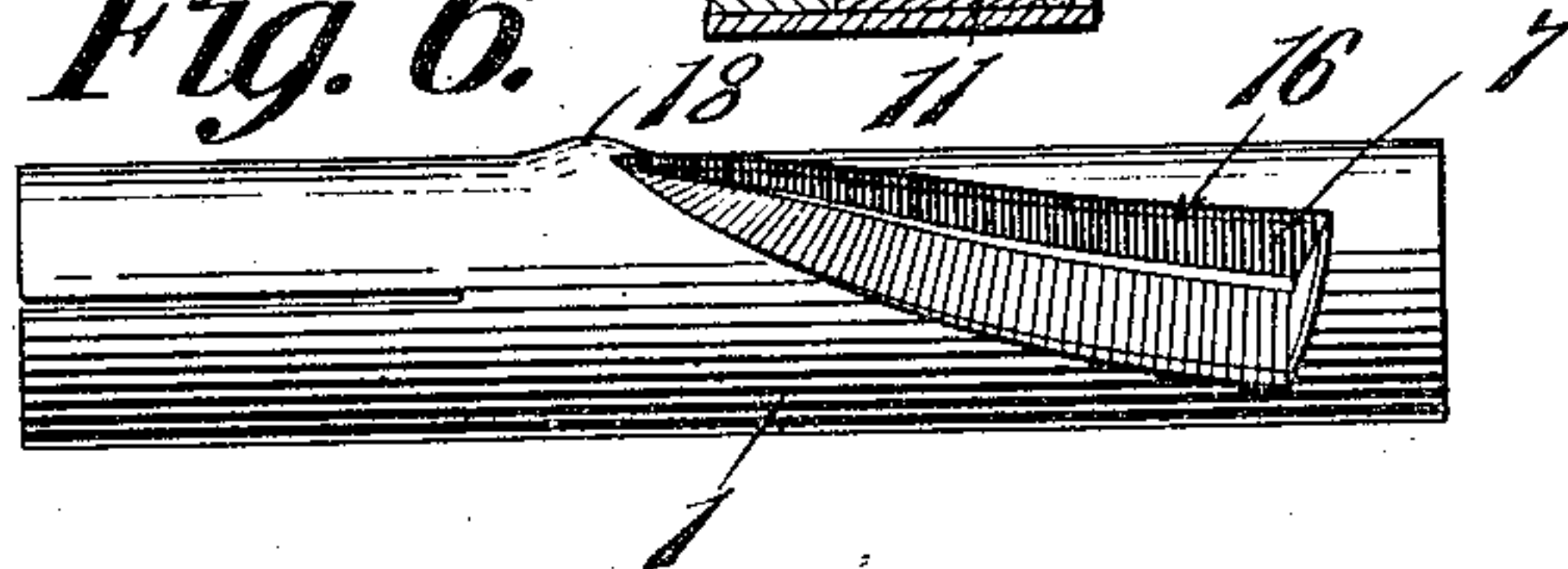


Fig. 5.

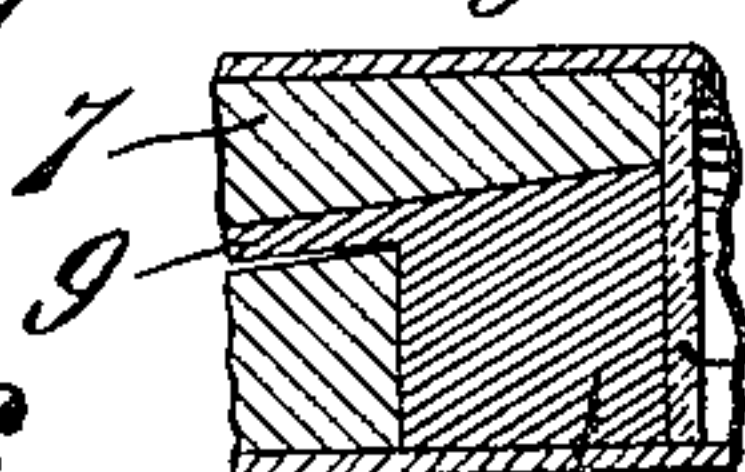


Fig. 9.

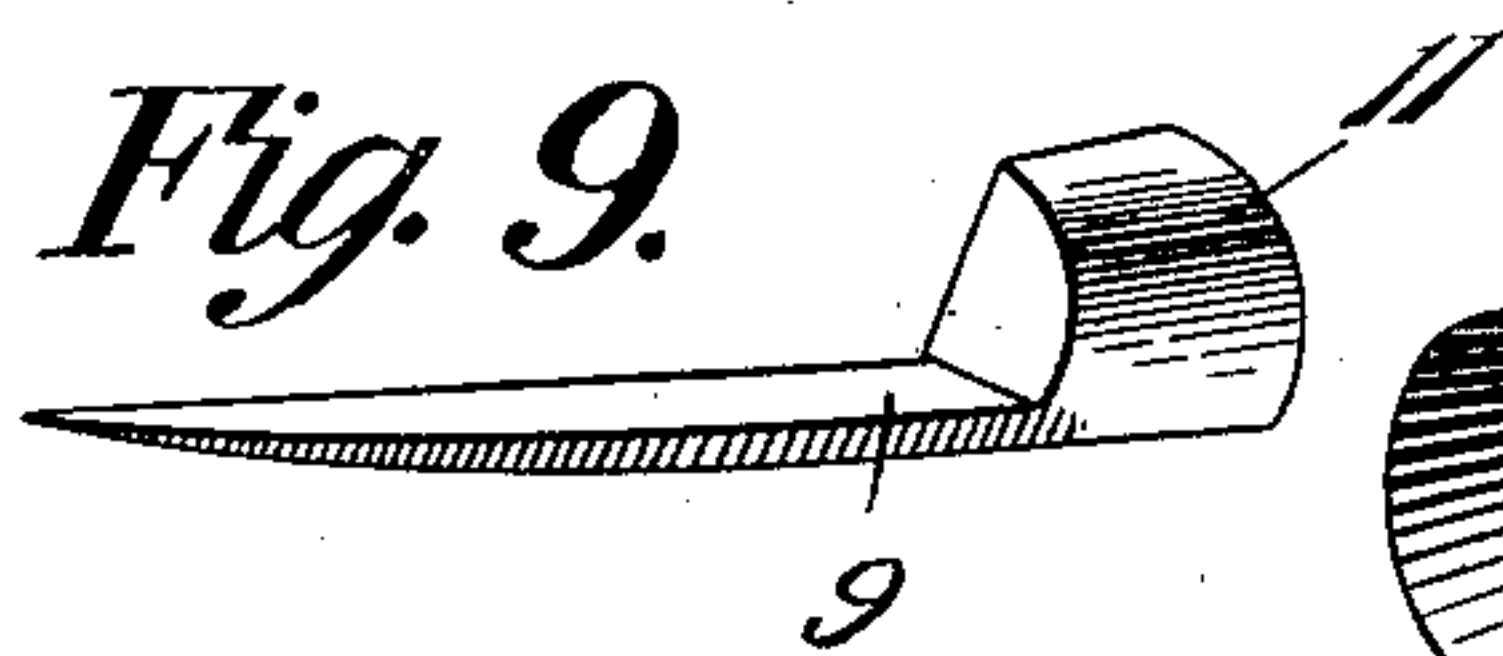


Fig. 8.

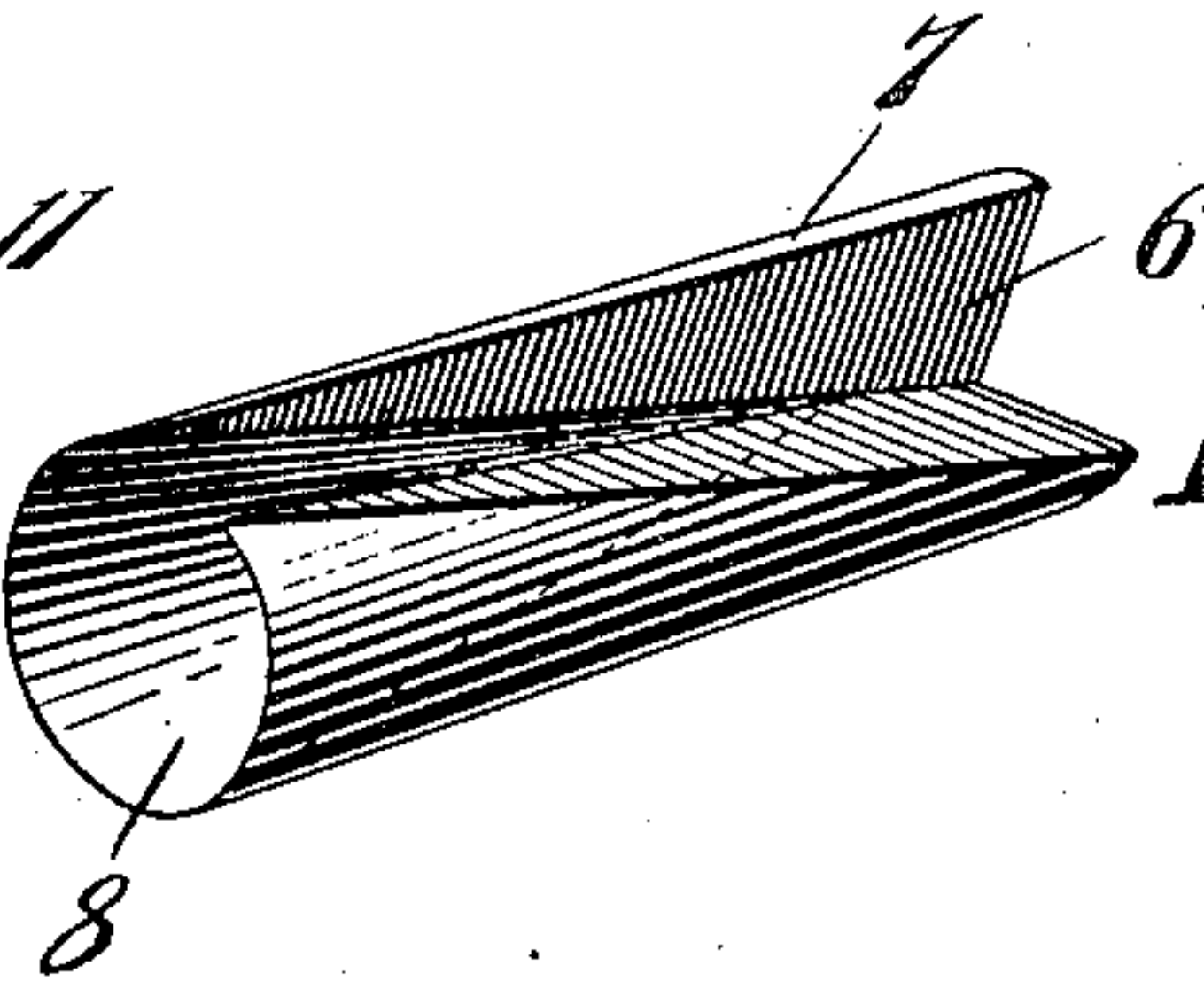


Fig. 10.

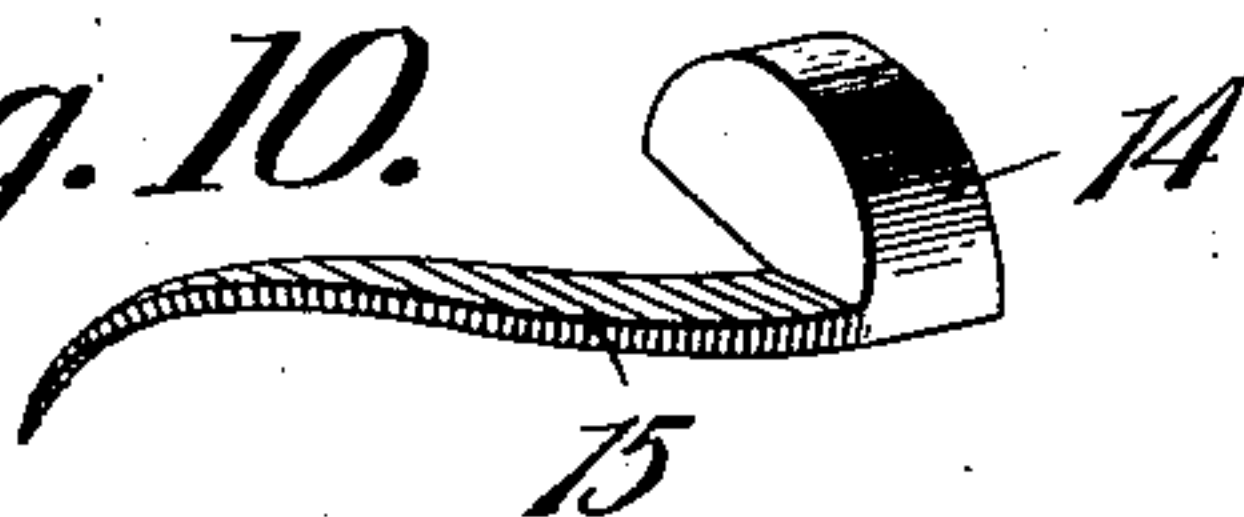


Fig. 13.

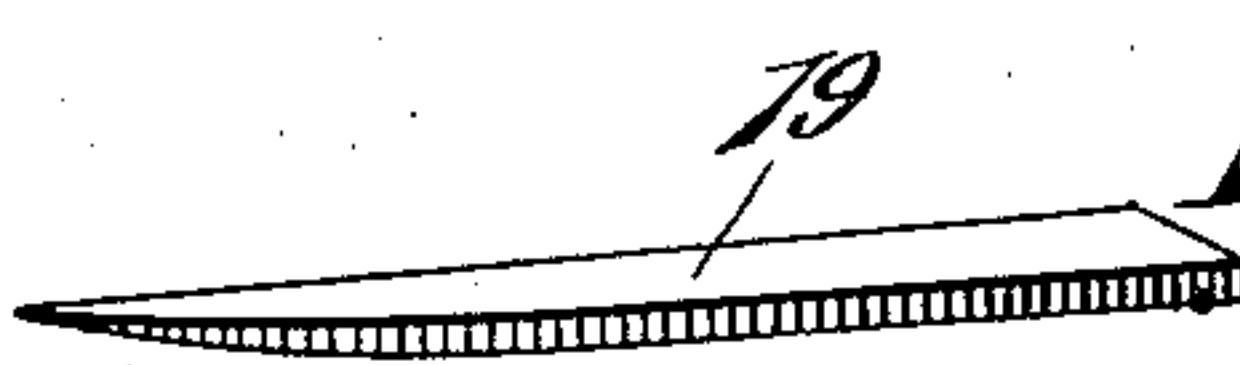


Fig. 11.

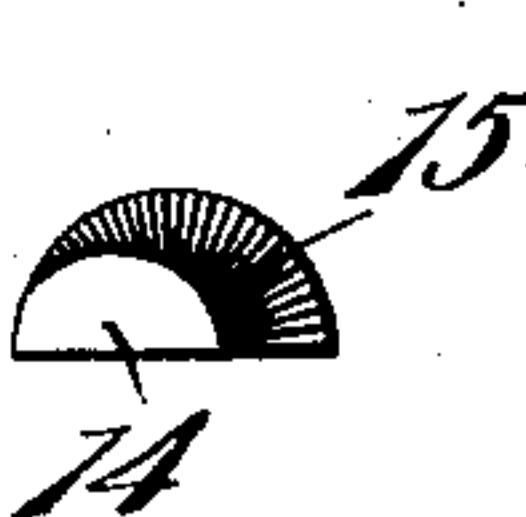
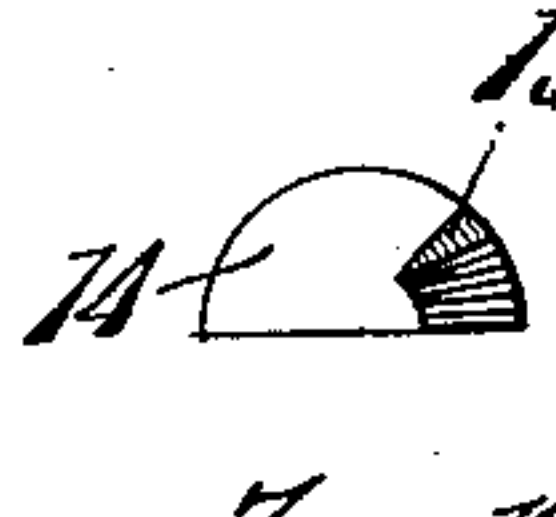


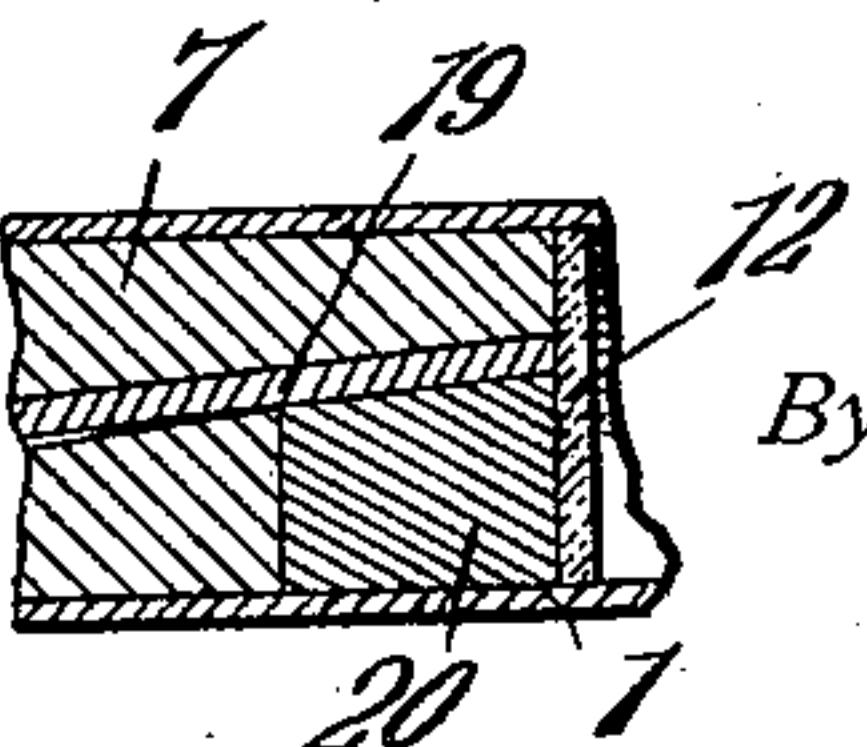
Fig. 12.



WITNESSES:

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Fig. 14.



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UNITED STATES PATENT OFFICE.

JOHN E. PARRISH, OF JOHNSON CITY, TENNESSEE.

PENCIL-SHARPENER.

No. 847,363.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed June 23, 1906. Serial No. 323,110.

To all whom it may concern:

Be it known that I, JOHN E. PARRISH, a citizen of the United States, residing at Johnson City, in the county of Washington and State of Tennessee, have invented a new and useful Pencil-Sharpener, of which the following is a specification.

This invention relates to pencil-sharpeners; and its object is to provide a combined pencil cap and sharpener adapted to be carried upon the end of a pencil, and which is durable in construction, simple, and which will effectually sharpen a pencil when the same is inserted therein.

Another object is to provide novel means for seating a cutting-blade within the cap, said seat also constituting a guide or socket for the pencil while the same is being fed to the blade.

A still further object is to so dispose the blade as to insure a smooth cut.

With the above and other objects in view the invention consists of a tubular cap having a slot therein adapted to register with the slot of a core having a conical socket therein. This core is permanently located within the cap and has a seat for holding a blade which is adapted to extend along the slot and to cut a pencil which may be rotated within the socket. The end of the blade extends into the enlarged portion of the cap, so as to be held at all times out of the path of the pencil. Said end is therefore prevented from biting into the pencil and producing a rough and unsightly surface.

The invention also consists of certain other novel features of construction and combinations of parts, which will be hereafter more fully described, and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is an elevation of a portion of a pencil having this improved sharpener in position thereon, a portion of said sharpener being broken away. Fig. 2 is a longitudinal section through the sharpener. Fig. 3 is a section on line *xx*, Fig. 2. Fig. 4 is a section on line *yy*, Fig. 2. Fig. 5 is a longitudinal section through the head of the blade and the adjoining portion of the cap and core. Fig. 6 is an elevation of a modified form of sharpener. Fig. 7 is a section through a portion thereof and showing the disposition of the point of the blade. Fig. 8 is a perspective view of the core detached. Fig. 9 is a detail view of one of the blades

adapted to be used with the device. Fig. 10 is a detail view of a modified form of knife. Fig. 11 is an end view thereof. Fig. 12 is a transverse section therethrough. Fig. 13 is a detail view of another form of knife, and Fig. 14 is a section through a portion of the cap and showing the manner of fastening in position the knife shown in Fig. 13.

Referring to the figures by characters of reference, 1 is a tubular cap having one end portion screw-threaded, as shown at 2, and preferably milled exteriorly, so that the same may be readily grasped by the operator and held against rotation. A longitudinally-slotted contracted portion 3 is formed at the other end of the cap and is adapted to fit snugly around a pencil 4. An elongated triangular slot 5 is formed within the cap 1 at a point between the threaded and contracted portions thereof and registers with an angular groove 6, formed longitudinally within a substantially cylindrical core 7. A conical socket 8 extends into the core from one end, and the groove 6 is disposed at an angle to the longitudinal axis of the core, so as to intersect the wall of the socket from the apex to the inlet-opening thereof. A blade 9 is seated upon one wall of the groove 6, and the cutting edge thereof projects slightly into the socket 8 and almost at a tangent thereto. The point of this blade fits snugly against the inner face of cap 1 and in rear of the shoulder 10, formed by the contracted portion 3, this arrangement being clearly apparent in Fig. 2. The other end of the blade 9 has a head 11, adapted to fit snugly within that portion of the groove 6 between the apex of socket 8 and the outer end of the core. Said head therefore prevents the knife from rotating or becoming displaced. As the knife rests at an angle to the longitudinal center of the core the wall of the cap prevents the blade from moving in the direction of the point thereof. Longitudinal movement of the blade in the opposite direction is prevented by a thin disk 12, of solder or cement, which is placed over the outer end of the head 11 and the core 7. A rubber eraser 13 may be inserted in the threaded portion 2 of the cap, so as to assist the disk 12 in holding the parts in position. The core 7 may be either inserted within the cap 1 or may be formed therein. In the latter case a core shaped to correspond with the socket 8 and the groove 6 is properly positioned within the cap, and the lead or other metal of which the permanent core 7 is

to be formed is then poured into the cap. This operation is an obvious one, and it is not deemed necessary to go into detailed description or illustration thereof.

5 When it is desired to sharpen the pencil, the cap is removed therefrom and the point inserted through the contracted portion 3 and into the socket 8. The pencil is then rotated against the edge of the blade and pushed
10 gradually inward. The shavings will be discharged through the slot 5 in the cap, and a point will be quickly produced. As the point of the blade is disposed out of the path of the pencil, it cannot bite thereinto, and a smooth
15 cut is therefore insured.

Instead of providing a cutting-blade with a straight edge, such as shown in Fig. 9, said edge may be of spiral form, as shown in Figs. 10, 11, and 12. In such event the core 7
20 must of course be formed with a seat to correspond therewith. As shown in said figures the head 14 of the blade 15 is of semicylindrical form; but it is to be understood that, if preferred, said head must be of shape
25 shown in Fig. 9, or the head 14 may be substituted for the head 11. The slot 16 in the cap must also be shaped to conform with the spiral blade, and such a slot has been shown
30 in Fig. 6 in connection with a modified form of cap 17. Said cap is different from the cap 1 in that it is of uniform diameter throughout its length, and in order that the end or point
35 adjacent the point of slot 16, so as to receive the point of the blade, as shown in Fig. 7.

In Fig. 13 has been shown a blade 19 which is formed without a head and which, as shown in Fig. 14, is adapted to be inserted
40 into the groove in core 7 and held therein by a separate wedge 20.

It will of course be understood that various other modifications may be made without departing from the spirit or sacrificing the
45 advantages of the invention, and I therefore reserve the right to make such changes as fairly fall within the scope of the claims.

What is claimed is—

1. A pencil-sharpener comprising a slotted
50 cap, a longitudinally-grooved core disposed within the cap, said core having a socket intersected by the groove, a blade insertible longitudinally into one end of the core and seated within the groove and projecting into
55 the socket, and means upon one end of the blade for holding the blade against displacement.

2. A pencil-sharpener comprising a slotted
60 cap, of a grooved core seated within the cap and having a socket intersected by the groove, a cutting-blade insertible longitudinally into one end of the core and seated within the

groove and projecting into the socket, a guard integral with the cap and overlapping the point of the blade and means upon one end
65 of the blade and core for holding the blade against displacement.

3. A pencil-sharpener comprising a slotted cap, a core within the cap and having a socket therein, and an inclined longitudinal groove
70 intersecting the socket, a cutting-blade seated within the groove and insertible longitudinally into one end of the core and projecting into the socket, and means extending over one end of the blade and core for holding the
75 blade against displacement.

4. A pencil-sharpener comprising a slotted cap, a core within the cap and having a socket therein and an inclined longitudinal groove intersecting the socket, a cutting-blade seated
80 within the groove insertible longitudinally into one end of the core and projecting into the socket, means upon one end of the blade and core for holding the blade against displacement, and a guard integral with the cap
85 and overlapping the point of the blade.

5. A pencil-sharpener comprising a slotted cap, a core within the cap and having a socket therein and an inclined longitudinal groove intersecting the socket, a cutting-blade seated
90 within the groove and projecting into the socket, and a head integral with the blade and seated within the core said blade and head being preferably insertible into one end of the core.

6. A pencil-sharpener comprising a slotted cap, a core within the cap and having a socket therein and an inclined longitudinal groove intersecting the socket, a cutting-blade seated
100 within the groove and projecting into the socket, a head integral with the blade and seated within the core, said blade and head being insertible into one end of the core and means overlapping said end of the head and core for securing the same together.

7. A pencil-sharpener comprising a cap having a longitudinal opening therein, a core molded within the cap and having a conical socket therein and an inclined groove intersecting the socket, a knife seated within the
110 groove and projecting into the socket, a head integral with the knife and seated within the groove, said knife and head being insertible longitudinally into that end of the core containing the small end of the socket and hold-
115 ing means overlapping one end of the head and core.

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

JOHN E. PARRISH.

Witnesses:

J. ROSS COLHOUN,
C. E. DOYLE.