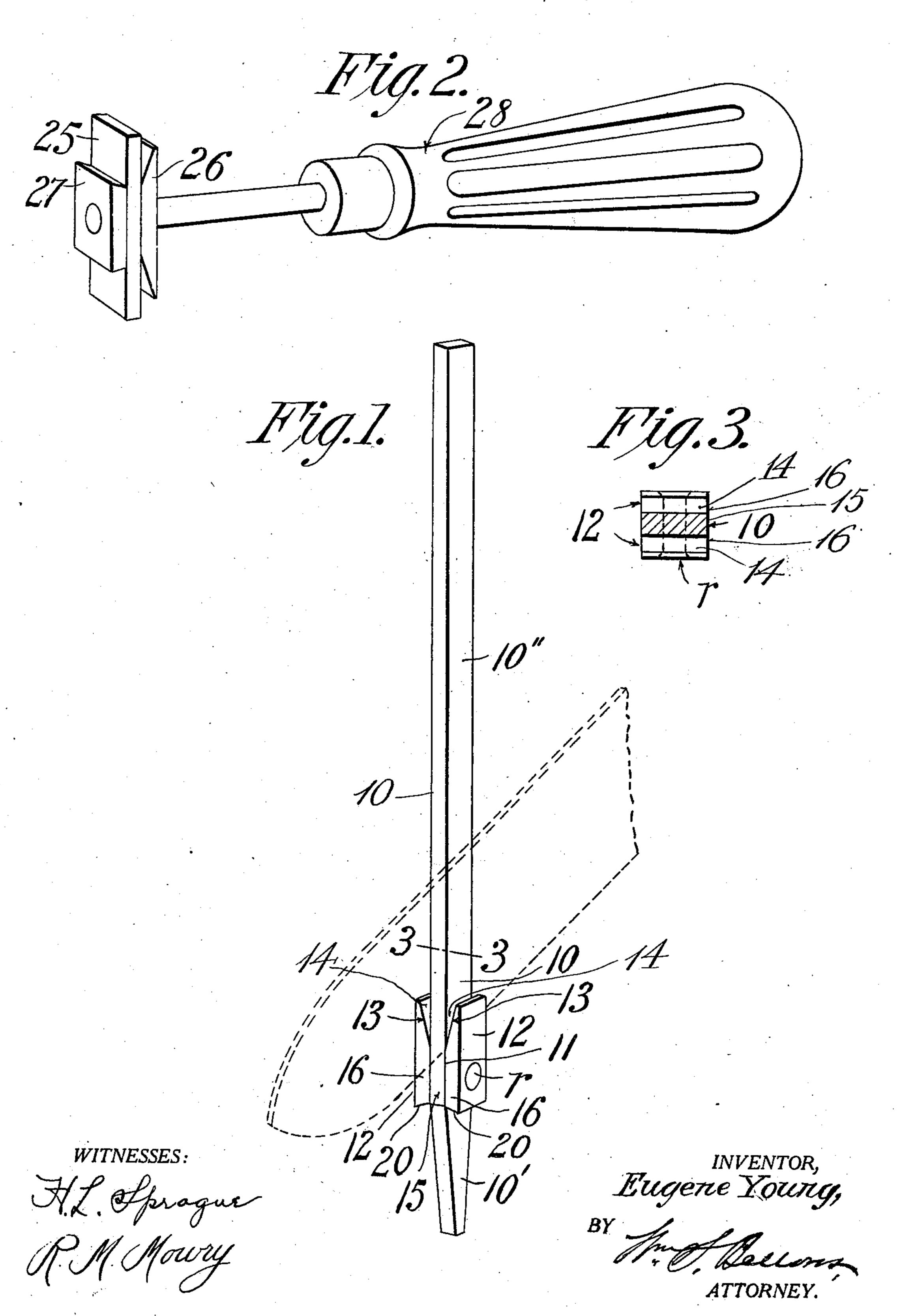
E. YOUNG. SHARPENING TOOL.

APPLICATION FILED MAR. 23, 1908.



UNITED STATES PATENT OFFICE.

EUGENE YOUNG, OF SPRINGFIELD, MASSACHUSETTS.

SHARPENING-TOOL.

No. 895,708.

Specification of Letters Patent.

Patented Aug. 11, 1908.

Application filed March 23, 1908. Serial No. 422,821.

To all whom it may concern:

Be it known that I, Eugene Young, a citizen of the United States of America, and resident of Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Sharpening-Tools, of which the following is a full, clear, and exact description.

This invention relates to knife-sharpeners, and has for one of its objects the provision of a device of this character which is composed of two or more coacting sharpening members, the adjacent surfaces of which are ground so as to come into perfect contact with each other and to form between them an angle, the apex line of which constitutes the point of engagement between said members and the knife edge to be sharpened.

My invention has, furthermore, for its object the improved construction of the sharpening-members, which permits the latter to be ground and reground simultaneously to preserve a perfect one-plane surface, in contradistinction to the two-plane overlapping disks or other sharpening members employed heretofore.

A further object of the invention may be found in the provision of differently-ground surfaces in the same tool, so that the latter may be advantageously used for sharpening objects, the cutting edges of which are constructed to meet different requirements, as for instance, knives, scissor-blades, etc.

The invention has been clearly illustrated in the accompanying drawings in which,—

Figure 1 shows a perspective view of a sharpening-tool embodying my improvements, and Fig. 2 shows a modification thereof; Fig. 3 is a section on line 3—3, indi
40 cated in Fig. 1.

In the drawings, 10 denotes a bar, the lower end 10' of which is preferably tapered to form a foot for supporting the same on a table or bench, while its upper end 10" constitutes a handle.

The bar 10 is ground at its sides as at 11 to form a perfect contact with one or more sharpening members 12 secured to the bar by rivets r and the faces 13 of which are ground

to form angular recesses 14, the apexes or 50 lines of intersection of which are consequently sharply-defined lines which cannot be obtained if the bar 10 and members 12 were made in one piece.

Inasmuch as efficiency of the tool depends 55 to a great extent upon the manner in which the opposite sides of the article to be sharpened are engaged, viz: that both sides thereof should be acted upon at every point of its edge-length, the faces 15 and 16 of the bar 10 60 and members 12 respectively, are ground in one plane and substantially at right angles, therefore causing the edge of a knife blade to be acted upon on both of its sides at once and on each point of its edge without any tend- 65 ency of deflecting the knife, as it is drawn through, and without liability of rendering the edge "wavy", the active portion of the tool being at the point of intersection between the faces 11, 13, 15 and 16.

In order to obtain the best results as to a sharp edge, it is self evident that the angle between the sides of the bar 10 and the coacting face 13 of the member or cheek 12 should be at least approximately equal to angle of blade sides at the edge, and inasmuch as the tool is built up from separate pieces, I am enabled to meet any required condition in an absolutely correct manner by grinding the cheek-faces according to the require- 80 ments.

In the drawings the smaller angle will meet the general demands regarding carving and pocket-knives, and, in order to provide for the "wide-angle" blades such as scissors, 85 etc., I provide the cheeks 12 with ground faces 20 the inclination of which relative to the side of the bar 10 corresponds substantially with articles of that nature.

In order to avoid the necessity of grinding 90 the front face of bar and cheek for a distance more than required, the said face may project beyond the surface of the bar, or on the other hand the handle and foot portions thereof may be reduced, a result which is ac-95 complished by tapering said portions as indicated in connection with the foot portion 10' above described.

In Fig. 2 I have illustrated a modification, the bar 25 and cheeks 26, 27, being comparatively short, and the handle 28 being applied at the side of the tool.

A sharpening-tool comprising a bar having a plain side, and a cheek member secured to the bar and having a plain surface contact with said side to form a defined line of inter-

section, the bar and cheek having their front 10 faces in one plane.

Signed by me at Springfield, Mass., in presence of two subscribing witnesses.

EUGENE YOUNG.

Witnesses:
ROBERT G. YOUNG,
WM. S. Bellows.