Aug. 8, 1950 J. V. AMENDOLA 2,518,111

SCISSORS GRINDER

Filed Nov. 24, 1947

Fig. 1.

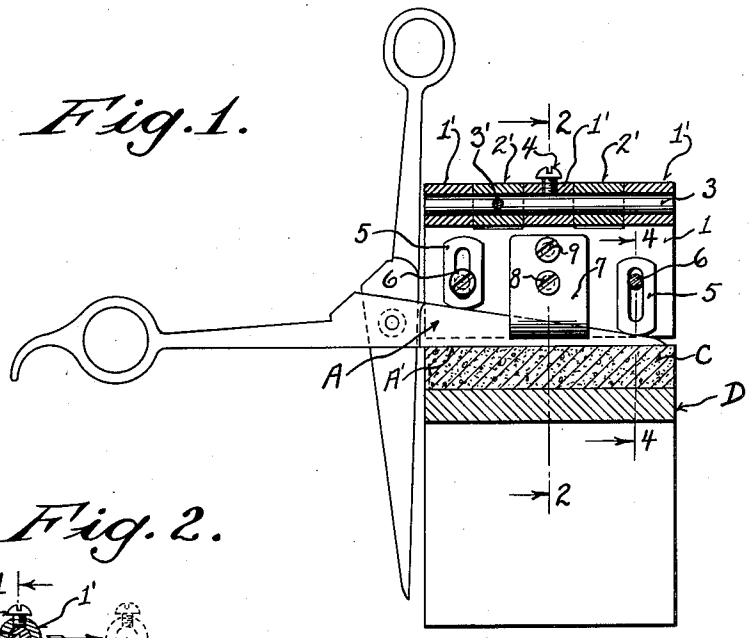


Fig. 2.

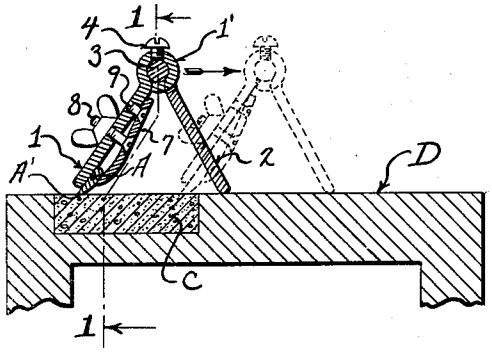


Fig. 3.

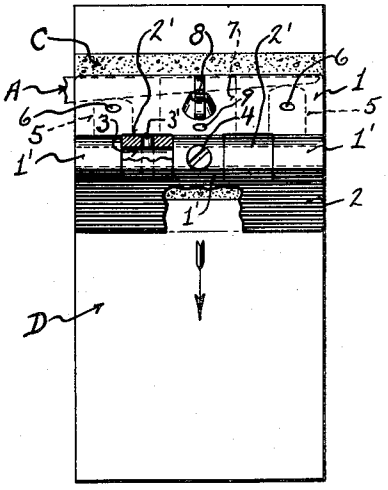
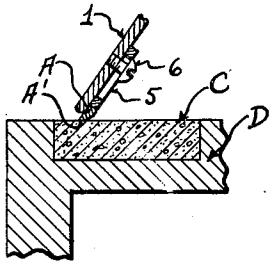


Fig. 4.



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SCISSORS GRINDER

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Application November 24, 1947, Serial No. 787,743

2 Claims. (Cl. 51—221)

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My invention refers to shear blade sharpeners and particularly to barber shears or the like.

The primary object of my invention is to provide a pair of leaves in hinge connection, whereby the angle between the base hinges of said leaf may be varied, it being understood that one of said leaves is provided with shear blade clamping mechanisms.

A further object of my invention is to provide one of the hinged leaves with a blade clamp and a pair of adjustable stops for the back of a shear blade.

It is understood that when a shear blade is clamped to one of the hinged leaves the associated leaf is adjusted upon its pintle, to vary the distance between the edges of the blades, whereby the bevel cutting face of said blade is positioned in a plane, intersecting the edges of said blades, whereby the sharpener may be reciprocated back and forth upon any standard abrading surface.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the novel construction, combination and arrangement of parts, substantially as hereinafter described, and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawings is illustrated one complete example of the physical embodiment of the present invention constructed according to the best mode so far devised for the practical application of the principles thereof.

In the drawings,

Figure 1 represents a sectional faced view of a shears or scissors sharpening tool embodying the features of my invention, the section being indicated by line 1—1 of Figure 2.

Figure 2, a cross section of the same, the section being indicated by line 2—2 of Figure 1.

Figure 3, a plan view of the tool, and Figure 4, a fragmentary cross-sectional view, the section being indicated, by line 4—4 of Figure 1.

Referring by characters to the drawings, 1 indicates a blade carrying leaf and 2 a guide leaf. The blade carrying leaf is provided with knuckles 1', and the guide leaf 2 carries similar knuckles 2'. These knuckles are pivotally connected by a pintle stud 3. The pintle stud is rigidly secured to one of the guide leaf knuckles 2' by a pin 3', and the knuckles 1', of the blade carrying leaf, are loosely mounted upon said pintle, whereby the angle between the two leaves is varied.

As best indicated in Figures 1 and 2 of the drawings, the central knuckle 1' of the blade carrying leaf is rigidly locked to the pintle 3 and guide leaf 2, by a set screw 4, whereby the angle between the blades is locked.

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Thus, it will be noted that the hinge leaves are radially adjusted and locked together to conform to the angle of the bevel cutting edge of a pair of shears, whereby their bottom edges vary with reference to the space therebetween and this angle adjustment is locked, by means of the set screw 4.

As best shown in Figure 1 of the drawings, a shear blade A, is adjusted to the bottom edge of the leaf 1 and parallel therewith.

The inclined back of said blade is supported by stop blocks 5—5, which stop blocks are slotted and are secured by set screws 6, whereby their lower edges may be butted against the inclined back edge of the blade and locked in such a butting position, to firmly hold the blade in a grinding position.

The blade A is firmly clamped to the rear face of the leaf 1, by a clamping jaw 7, which jaw engages the face of the blade and is secured by a thumb screw 8 and for maintaining the jaw in its proper relations, I provide an anchor screw 9, which engages the leaf and serves as a fulcrum.

While I have specifically shown and described one form of blade clamp and one form of adjustably locking the leaves, with reference to their angle, it is apparent that I may vary such mechanisms without departing from the spirit of my invention.

In order to materially reduce the cost of manufacture, I utilize a standard type hinge found in open market and lock the knuckles of one leaf to the pintle and adjustably secure a pintle of the other leaf to said pintle.

From the foregoing description it is apparent that an abrading plate C, may be mounted flush upon the face D of any suitable bed. In order to properly sharpen or grind the shear blade, the beveled cutting edge A' must be, in horizontal alignment with the lower edge of the guide leaf 2, and hence, the leaves are adjusted at the proper angle for grinding. Thereafter anyone unskilled in the art of grinding blades, may quickly sharpen the blades of scissors or shears by simply reciprocating the tool, back and forth, upon the abrading plate surface, which is flush with the surface with the bed D, it being noted that the idle blade of the shears may conveniently be suspended from its pivot connection, in a vertical position, with reference to the grinding or sharpening equipment.

I claim:

1. A scissors blade sharpener hinge having a pair of leaves provided with intermeshed knuckles and a pintle, one of the leaves being a blade carrying member and the other leaf a guide member; a pin for securing one set of leaf knuckles to the pintle, an angular adjustment for the other leaf, comprising a screw for locking one of its knuckles to the pintle, a centrally disposed

clamping body pivotally secured to said blade carrying leaf for clamping the face of a scissors blade to said blade carrying leaf, a screw for binding the clamping body to the blade and a pair of slotted blocks adjustably fitted to the face of said blade carrying leaf upon opposite sides of the clamping body, adapted to abuttingly engage with the inclined edge of the scissors blade, and screws for confining the blocks, whereby the cutting edge of the scissors blade is held below the edge of said blade carrying leaf.

2. A scissors blade sharpener hinge having a pair of leaves provided with intermeshed knuckles and a pintle, one of the leaves being a blade carrying member and the other leaf a guide member; a pin for securing one set of leaf knuckles to the pintle, an angular adjustment for the other leaf, comprising a screw for locking one of its knuckles to the pintle, a centrally disposed clamping body pivotally secured to said blade carrying leaf for clamping the face of a scissors blade to said blade carrying leaf, a screw for binding the clamping body to the blade and a pair of slotted blocks adjustably fitted to the face of said blade carrying leaf upon opposite sides of the clamping body adapted to abuttingly

engage with the inclined edge of the scissors blade, screws for confining the blocks, whereby the cutting edge of the scissors blade is held below the edge of said blade carrying leaf, an abrading plate, and a bed having a seat in its face receiving said abrading plate, the face of the same being flush with the bed face, whereby the guide leaf of the hinge unit will slide upon said bed face as the hinge unit rides back and forth in a sharpening operation.

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