

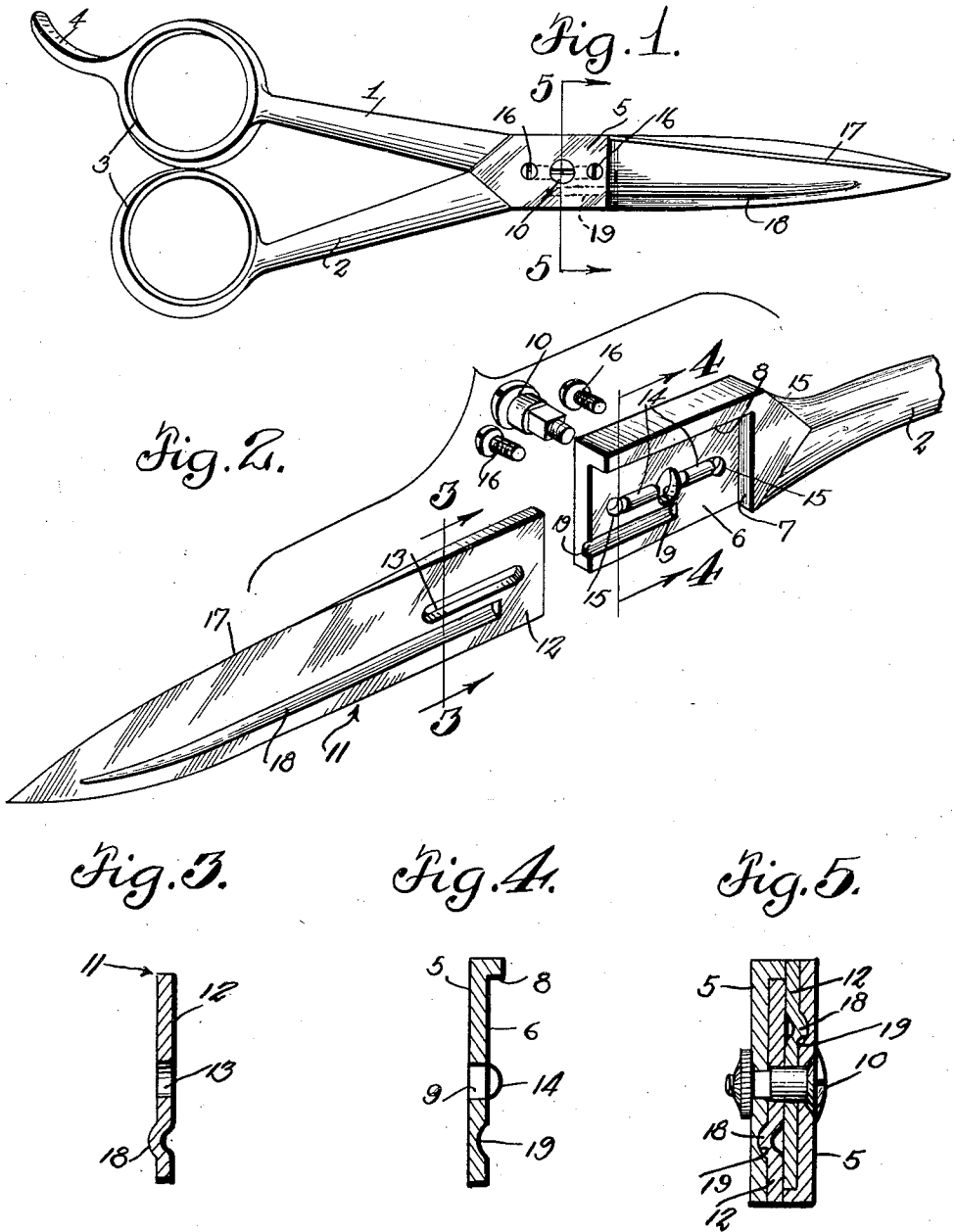
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SHEARS

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334

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SHEARS

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1 Claim. (Cl. 30—13)

The present invention relates to shears or scissors and more particularly, to barbers' shears wherein the blades are detachably connected to the handle of the shears, in order that re-sharpened or new blades may be immediately and readily connected, thus permitting the handles to be used indefinitely or until they become broken, materially reducing the cost thereof, as the blades which are subject to wear may be readily and easily replaced.

It is the primary object of the present invention to provide shears of the character aforesaid in which the handle members are made of one grade of material, and the blades made of a different or more expensive grade of material, thereby giving unto the user of the shears, more efficient cutting blades at a much reduced cost.

It is likewise another important object of the present invention to provide shears of this character with an improved and more rigid connection between the blades and the handles therefor, whereby new cutting blades may be readily substituted and when connected to the handles, will be so connected as to hold the blades firmly and rigidly to the handles, as if each handle and blade therefor were made from an integral piece of metal.

Other objects of the invention will be in part obvious and in part pointed out hereinafter.

In order that the invention and its mode of operation may be readily understood by persons skilled in the art I have in the accompanying illustrative drawing, and in the detailed following description based thereon, set out several possible embodiments of the same.

In the drawing:

Figure 1 is a side elevation of the shears embodying the present invention;

Figure 2 is a perspective disassembled view of a portion of one of the handles and its blade, together with the means for forming a connection therebetween;

Figure 3 is a cross section taken along line 3—3 of Figure 2;

Figure 4 is a similar sectional view, taken along line 4—4 of Figure 2, and

Figure 5 is a section taken along line 5—5 of Figure 1.

Referring now more particularly to the accompanying drawing wherein like corresponding parts are designated by similar reference characters throughout the several views, I have herein shown a pair of shears, such as are employed by barbers and composed of two handles 1 and 2, having loops or eyes 3 at their free ends to receive the fingers of the hand, one of said loops or eyes being provided with a hook-shaped extension 4. The opposite ends of each handle member are enlarged and of substantially rectangular configuration in plan view, having a flattened surface 5 at the normally outer side thereof, and adapted to be pivoted together. The opposite face or normally inner side of this pivot end of each handle is provided with a recess 6 also of rectangular configuration and having two of its sides open, leaving an abutting end shoulder or wall 7 and a projecting flange 8 which extends at right angles to the shoulder 7. This pivot end of each handle is provided with a medially arranged opening 9 through which is adapted to extend the pivot bolt or screw 10, which latter pivotally connects the handles together.

The blades 11 of this shear are to be of standard formation whereby they may be readily substituted for either handle of the shear. Each consists of a flattened substantially straight end portion, as is indicated at 12, which is adapted to be seated within the recess 6 formed in the pivot end of either one of the handles 1 or 2. This end portion 12 of the blade is provided with an elongated slot 13 which is adapted to register intermediately with the opening 9 of the handles, whereby the pivot bolt 10 may extend there-through. The elongated slot 13 is adapted to be engaged with corresponding projections 14 preferably formed bodily with the normally inner surface of the pivoted ends of the shear handle members and disposed on each side of the pivot opening 9, while the extreme opposite end portions of said slot are made to register with a pair of screw threaded openings 15, formed in the pivoted end portion of the handles and adapted to receive the set screws 16. These set screws 16 are adapted to have threaded engagement with the openings formed correspondingly within the opposed pivoted handles in order that the cutting blades may be attached thereto. The cutting blades proper extend from and are formed contiguous with the flattened end portion 12 and, of course, may be of a length suitable for the handles to which they are to be attached. These blades are preferably straight and provided with a cutting edge 17, being tapered towards their inner extremity.

Formed upon that portion of the blade diametrically opposite the cutting edge 17 thereof is an offset projection 18, which, as more clearly shown in Figures 1 and 2 of the drawing, is made to extend substantially throughout the entire length of the blade. Upon reference to the drawing, it

Formed upon that portion of the blade diametrically opposite the cutting edge 17 thereof is an offset projection 18, which, as more clearly shown in Figures 1 and 2 of the drawing, is made to extend substantially throughout the entire length of the blade. Upon reference to the drawing, it

will be seen that a part of the offset projection 18 is made to be brought into engagement with a correspondingly formed recess 19 positioned in the pivot ends of the handle members of the shears.

The handles 1 and 2 are made from die casting or forging, of an inexpensive metal and by providing each detachable cutting blade for these handles, it is obvious that they may last indefinitely, or until they become broken. These blades are preferably cut out from a piece of high grade steel and stamped in the formation hereinbefore described. In this manner, the shears may be manufactured at a greatly reduced cost and yet give the purchaser shears to which new cutting blades may be easily and readily connected, should the latter become worn or broken.

In providing the projecting flanges or shoulders 7 and 8 upon each pivot end of a handle adapted to receive the correspondingly shaped end 12 of each blade, and by forming upon the relative parts of the handles and blades cooperating projections and recesses therefor, it is obvious that when the pivot bolt or screw 10 extends therethrough, a rigid connection is established between each handle and its blade. Small set screws 14 are employed for attaching each blade to its handle, but the set screws would not be capable of establishing a permanent and rigid connection between the blades and the handles therefor, if it were not for the projecting flanges or shoulders 7 and 8, and the cooperating engageable projections and recesses 13, 14 and 18, 19, respectively. Therefore, it will be seen that the

set screws 14 are only connecting members between each blade and its handle, whereas the real shearing forces between the blade and its handle are transmitted through the shoulders or flanges and cooperating locking projections and recesses.

Manifestly, the construction herein shown is capable of considerable modification and such modifications as come within the scope of my claim, I consider within the spirit of my invention.

I claim:

A pair of shears comprising pivoted handle members, the pivoted end portions of said handle members being enlarged and having each a recess therein, blade members the inner ends of which are fastened to conform with the recesses in the enlarged ends of the handle members and having two faces thereof to lie flush with corresponding walls of said recesses, a detachable pivot member extending through pivot openings formed in the enlarged pivot ends of said handles, elongated projections formed bodily with the normally inner surfaces of the pivoted ends of said handle members and disposed parallel to the longitudinal axis and abutting, each with one end on the pivot or the aperture thereof, said blade members having each an elongated slot for receiving the projection formed with its companion handle member and said detachable pivot member and set screws arranged at the opposite sides of said detachable pivot member for detachably connecting said blade members to the pivoted end portions of said handle members.

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