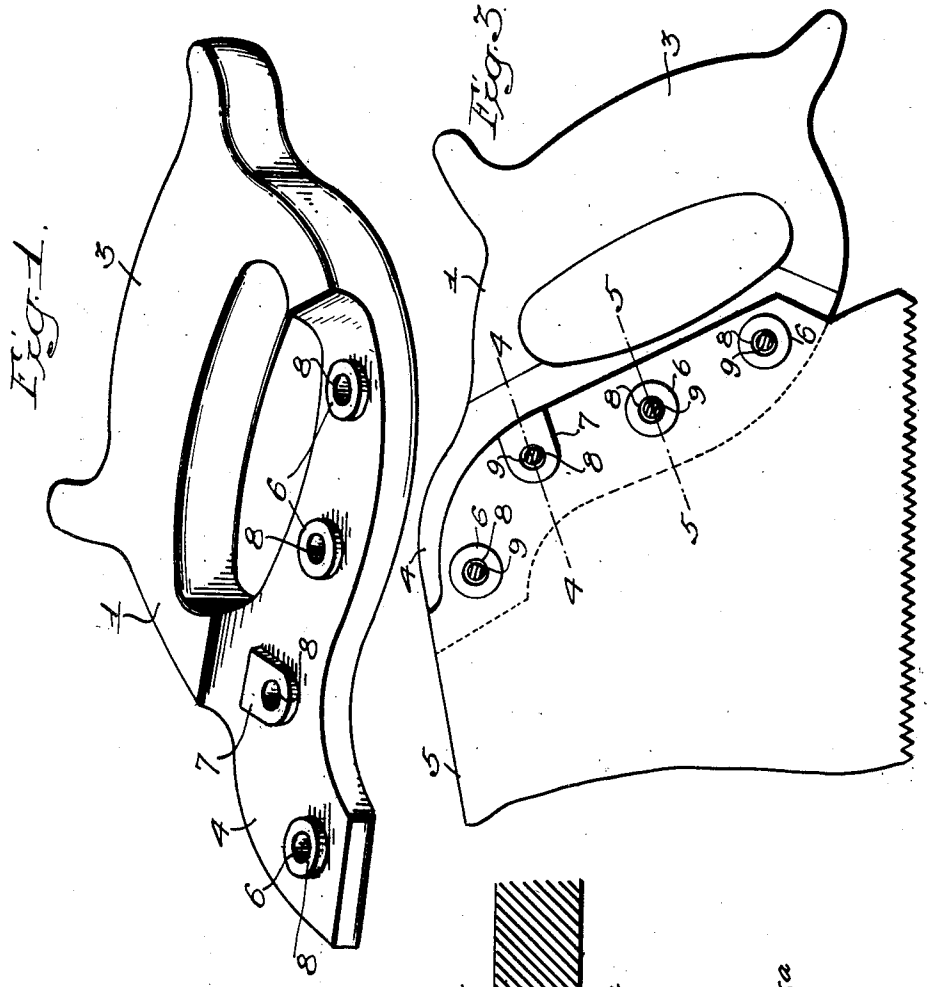
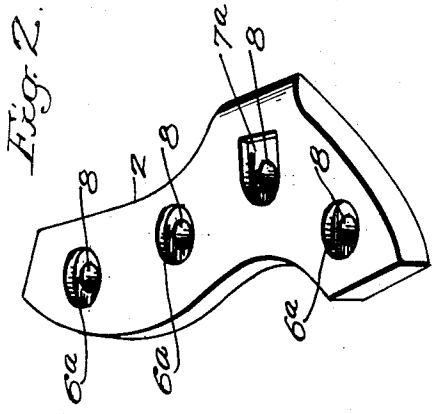
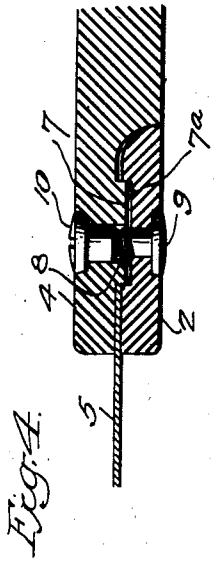
April 20, 1937. A. N. BLUM 2,077,509

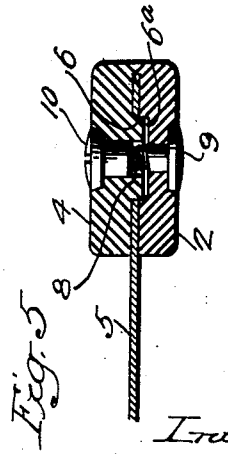
SAW HANDLE

Filed June 27, 1935

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# UNITED STATES PATENT OFFICE

2,077,509

## SAW HANDLE

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Application June 27, 1935, Serial No. 28,752

1 Claim. (Cl. 145—108)

This invention relates to improvements in handles for handsaws, and a principal object of the invention is to provide a handle which shall be stronger, more durable and of better appearance than prior handles of the same class.

Another object of the invention is to provide a handle of novel design insuring retention of the saw blade positively and securely in the handle without necessity for excessive tightening of the retaining screws.

Another object of the invention is to provide a handle designed to prevent the blade from "working" in the handle, thereby avoiding cutting or abrasion of the handle by the blade.

Still another object of the invention is to provide a handle so designed that the blade may be remote from the retaining screws whereby all possibility of the blade damaging the screws is avoided.

A still further object of the invention is to provide a handle insuring an equalized pressure on the blade and a permanent centralized and normal fit of the latter in the handle.

A further object is to provide a novel handle construction affording true interchangeability of blades and handles, and to this end the invention contemplates manufacture of handles from a material practically immune to the effects of changing atmospheric conditions and capable of maintaining its original form also under adverse conditions.

Still another object of the invention is to utilize the advantages for saw handle purposes of available modern molding materials having the characteristics of relatively great strength, stability of form, durability, variety of colors and ornamental appearance.

In the attached drawing:

Figures 1 and 2 are views in perspective of the two separable elements of a handle made in accordance with my invention;

Fig. 3 is a fragmentary view of a saw equipped with the handle illustrated in Figs. 1 and 2, and

Figs. 4 and 5 are sections on the lines 4—4 and 5—5 respectively of Fig. 3.

With reference to Figs. 1 and 2 of the drawing, the handle therein illustrated comprises separable members 1 and 2. The member 1, the handle proper, comprises the usual hand-grip portion 3 and a section 4 of lesser thickness than the portion 3 and adapted to constitute a seat for the butt portion of the blade 5 as shown in Fig. 3. The member 2 of the handle, the shield shown in Fig. 2, conforms substantially in shape to the section 4 of the member 1 upon which it is adapted to be superimposed. Preferably, but not necessarily, the section 4 and the member 2 are of substantially the same thickness.

As shown in Fig. 1, that surface of the section 4 of the handle member 1 upon which the blade seats is provided with a plurality of projections 6 and 7 which in assembly project through correspondingly shaped openings in the blade 5; and the shield 2 as shown in Fig. 2 is provided with a corresponding series of recesses 6a and 7a into which the said projections extend. As shown in Figs. 4 and 5, the recesses 6a and 7a are of such depth that in assembly the terminal surfaces of the projections 6 and 7 are spaced from the bottoms of the recesses so that the flat surface of the member 2 surrounding the said recesses may bear upon the blade 5. In the present instance, the projections 6 are cylindrical in form, whereas the projection 7 is formed with flat sides.

The section 4 of the handle member 1 and the member 2 are provided with the usual apertures for reception of screws or bolts by means of which the members may be securely clamped upon the blade 5. In accordance with my invention, these apertures, designated by the reference numeral 8, pass through the projections 6 and 7 and the sockets 6a and 7a. The said bolts, as shown in Figs. 4 and 5, comprise male and female elements 9 and 10 respectively, both of which sections are provided with heads, which in assembly fit in countersunk recesses in the exposed surfaces of the members 1 and 2.

I prefer to form the members 1 and 2 of the handle of suitable plastics, moldable, cast or stamped, in which preferably the projections 6 and 7 are integral parts of the handle member 1. By reason of the fact that such materials are generally produced in molds or dies it is possible to accurately form the said projections and the corresponding apertures in the blade 5 to afford a good practical fit, so that in assembly the blade is positively held between handle and shield and secured against movement with respect to them. The projections 6 and 7, therefore, function after the manner of dowels to locate the blade in the handle, and the flat surfaces of handle and shield between which the blade is clamped effectively preclude movement in its plane of the blade with respect to the handle. The function of the member 2 of the handle under these conditions and of the retaining screws 9—10 is to securely clamp the blade upon its seat on the handle member 1, and due to the large effective clamping surfaces it is not necessary in order to insure

positive immobilization of the blade in the handle to unduly tighten the retaining screws 9—10. Immobilization of the blade in this manner, which prevents "working" of the blade in the handle, precludes the possibility of the blade cutting or defacing the latter. Furthermore, since the molded handle and shield are practically free from warping and changes of form, the opposed flat surfaces of the handle members engaging the opposite sides of the blade 5 insure permanent retention of the blade without deformation in a normal straight plane centrally of the handle, regardless of the degree to which the individual retaining screws 9—10 may be tightened. A further important feature of the construction resides in the fact that the retaining screws 9—10, which conventionally are made of brass, by reason of their positions in the projections 6—7 as described, are necessarily remote from the steel blade 5, so that danger of damage to these screws by the blade is avoided. Other advantages of the use of plastics, moldable, cast or stamped in the production of the handle of the type described reside in the fact that being free from changes of form as described, such handles are truly interchangeable with the blades. They are capable also of being made in various colors affording a materially improved and highly attractive appearance. When, as in the present instance, the handle is made of a plurality of parts, the appearance may be further improved by use of contrasting colors in the different portions of the handle.

While I prefer to form the projections 6 and 7 integral with the handle member 1, it will be understood that they may be made in the form of inserts molded into the body of the handle, such inserts being of metal or any other material that may be found desirable. Also, while the invention contemplates the use of a plastic, certain of the advantages of the novel construction described may be realized in handles made conventionally of wood or metal for example. It will be further understood that I do not limit myself to the details of the construction illustrated, such for example as the specific form and disposition of the projections 6 and 7, which are subject to considerable modification without departure from the invention.

I claim:

A saw handle comprising a body member having a seat for the saw blade and a plurality of elements projecting from said seat and adapted to fit correspondingly formed openings in said blade to position the latter on the seat, and a clamping plate to overlie the said seat for confining the blade to the latter and having recessed sockets for reception of the outer ends of said projecting elements, said body member and plate having registering apertures extending through the projecting elements and recesses respectively for reception of securing screws by means of which the body member and plate may be clamped together upon opposite faces of the blade, and said screws being separated from the edges of the blade openings through which they extend by the walls of said projecting elements.

ARTHUR N. BLUM.