April 7, 1959 J. T. GEERY 2,880,505

PLANING MEANS

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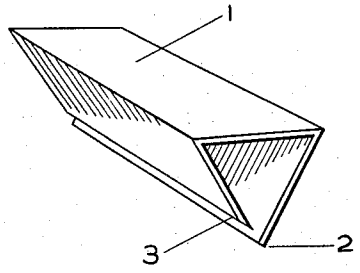


FIG. 1

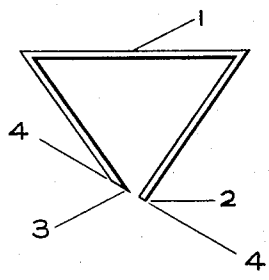


FIG. 2

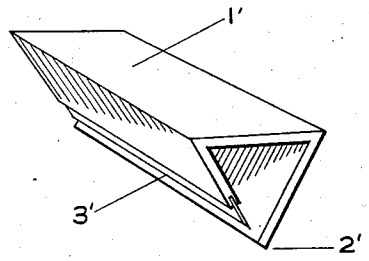


FIG. 3

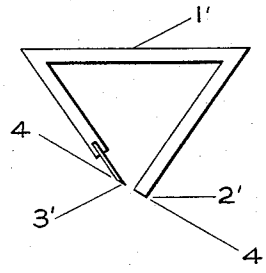


FIG. 4

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PLANING MEANS

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2 Claims. (Cl. 30—169)

This invention relates to a planing or scraping means to make smooth or finish any and all such surfaces as wood, paper, fabric, hides and skin, and more particularly to said means having a simple one-piece construction.

The present invention comprises one piece of metal or another suitable material having a cutting edge in a predetermined spatial relationship with a novel guide or guard which is not in a plane parallel with the blade of the cutting edge, but which is at a considerable angle from the plane of said blade. This feature enhances the accuracy with which the surface to be planed or scraped may be finished, and permits a planar or scraper construction of extremely safe, inexpensive and fool-proof design.

A further embodiment of the present invention comprises an innovation which is in keeping with the thought and intention of the invention to provide an integral planing or scraping means wherein the blade of the cutting edge is affixed to the one-piece body of said means of another suitable material in such a way that it may be sharpened, but may be neither removed nor replaced without destroying the unity of the organization.

Accordingly, a principal object of the invention is to provide a new and improved planing or scraping means.

Another object of the invention is to provide a new and improved planing or scraping means of one piece.

Another object of the invention is to provide a new and improved integral planing or scraping means construction.

Another object of the invention is to provide a new and improved integral planing or scraping means comprising a blade affixed to the body of said means of another suitable material.

Another object of the invention is to provide a new and improved integral planing or scraping means comprising a blade affixed to the body of said means of another suitable material in such a way that it may be sharpened, but may be neither removed nor replaced without destroying the unity of the organization.

These and other objects of the invention will become apparent from the following specification and drawings, of which:

Figures 1 and 3 are perspective views of embodiments of the invention.

Figures 2 and 4 are end views of the embodiments of Figures 1 and 3 respectively.

Referring to Figure 1, the invention comprises a one-piece body 1 of metal or another suitable material. The body has a triangular cross-section which is interrupted longitudinally to form a leading edge or guide 2 which may be serrated and a cutting edge 3 which further establish yet another plane or planing angle 4—4. Figure 2 is an end view of Figure 1.

Figure 3 is similar to Figure 1 and shows another embodiment of the invention wherein the blade of the cutting edge 3' is affixed to the one-piece body 1' of another suitable material in such a way that it may be sharpened, but may be neither removed nor replaced without destroying the unity of the organization. For example, the blade of the cutting edge 3' may be permanently molded into the one-piece body 1' of a suitable plastic, thereby becoming an integral part of the one-piece unit.

Figure 4 is an end view of Figure 3 and shows an embodiment of the invention wherein the construction of the one-piece body 1' may be light enough in cross-section so as to be flexible. Thus, the application of different pressures would affect the predetermined spatial relationship of the leading edge or guide 2' and the cutting edge 3', thereby altering the planing angle 4—4. Pressure exerted on the leading edge or guide 2', for example, would permit a closer, smoother finishing stroke when necessary while still retaining the essential safety characteristic of the invention itself; while any undue pressure on the blade of the cutting edge 3' would, in effect, destroy the planing angle 4—4, thereby providing an additional safety factor which would prevent any untoward injury to the surface to be made smooth or finished.

As can be seen from these embodiments, any of a number of different shapes, including those having more than three sides, might be used, the only important qualification being that the proper predetermined spatial relationship of the leading edge or guide and the cutting edge be maintained.

And while it is preferable that the blade of the cutting edge as shown in Figures 3 and 4 be permanently affixed to the one-piece body of another suitable material, it may be practical in some circumstances to so mount the blade of the cutting edge that it may be removed and replaced. For example, when a suitable elastic material is employed for the one-piece body, the blade of the cutting edge may be removably held or clamped frictionally in place in such a way that the proper predetermined spatial relationship of the leading edge or guide and the cutting edge will be maintained.

And while it is preferable that the one-piece body as shown in Figures 1, 2, 3 and 4 be hollow, it may be solid and of the same material as the one-piece body, thereby becoming an integral part of said body, the only important qualification being that a suitable longitudinal slot or recess be provided below and behind the cutting edge in such a way that the proper predetermined spatial relationship of the leading edge or guide and the cutting edge will be maintained.

And while it is preferable that the length of the one-piece body be such that the ends of said body may be conveniently held or grasped between the thumb and index finger, it will be understood that it may be of any length, if suitable holding means are provided.

And whereas I have described and illustrated a practical and operative means, it will be understood that many changes may be made in the size, shape, number and disposition of parts without departing from the spirit of my invention. I, therefore, wish my description and drawings to be taken as in a broad sense illustrative or diagrammatic, rather than as limiting me to my precise showing.

I claim:

1. Planing means comprising a hollow one-piece member of generally triangular cross-section having first, sec-

ond, and third sides, said first side being narrower than said second side to form a slot extending the full length of said first side, said slot being adjacent said second side, said first side having a cutting edge at one edge of said slot spaced a predetermined amount from the edge of said second side, said edge of said second side acting as a guide for said cutting edge.

2. Apparatus as in claim 1 wherein the sides of said hollow member are constructed to be flexible.

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