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R. W. POE

2,075,302

METAL SEVERING TOOL

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FIG. 7.

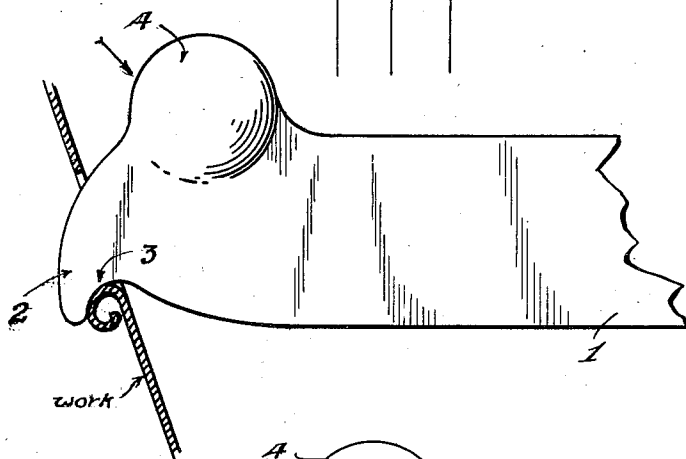


FIG. 2.

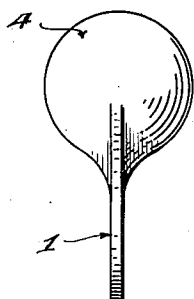
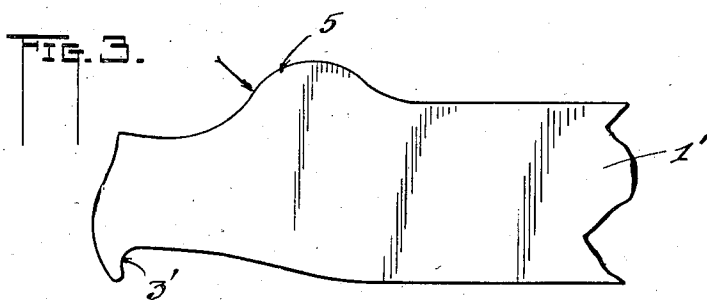


FIG. 3.



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METAL SEVERING TOOL

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4 Claims. (Cl. 164—80)

This invention pertains to improvements in metal cutting tools particularly of that type adapted for slitting sheet metal when removing portions thereof as in cutting openings, for example.

The purpose of my invention is to provide a sheet metal slitting tool with an abutment for receiving blows of a hammer, such abutment being in the vicinity of the work engaging and slitting portion thereof all to the end that a better control of the tool is possible in that the direction of delivery of the blows aids in the proper guidance of such tool in following curved lines.

That my invention may be fully understood in connection with the following description, I have provided the accompanying drawing wherein—Figure 1 is a side elevation of one form of the tool.

Figure 2 is an end elevation thereof or as seen from the left in Figure 1, and

Figure 3 is a slight modification of the tool of the earlier figures.

Ordinarily a tool of the nature mentioned consists of a length of flat steel bar relatively thin or about as shown in Figure 2 of the drawing which serves to remove a narrow strip of the sheet metal as it advances by the application of hammer-blows upon one end or that end farthest from the working point or metal severing point. My form of tool, however, is peculiarly constructed as will appear from the following description:

In Figures 1 and 2 of the drawing 1 indicates in general the body of the tool having any convenient or desired length, and relatively thin, the working edge or face being flat and having square corners at the side surfaces of the tool so that in use in slitting sheet stock a clean ribbon of the metal is sharply removed as in other tools of this nature.

The novel feature herein is the provision of a tool having a nose portion or hook portion 2, near the cutting portion 3 of which is an abutment portion 4 which may be of a ball form as denoted in the named figures, or as at 5 in Figure 3 it may be of the thickness only of the tool itself. But whatever its form the abutment portion lies adjacent to or in the neighborhood of the cutting end of the tool or near the edge applied to the work in severing the metal, the blows of a hammer, not shown, being delivered thereon at such a point, for example, as indicated by the arrow in both Figures 1 and 3. Due, however, to the fact that it is necessary at times to follow

curved lines the hammer-blows aid in following such lines by delivering the blows at such positions or from such directions as to aid in following such lines with extreme accuracy aided by guiding the tool at its free end as grasped by the hand in which such tool is held.

Since of ball form in one instance herein, the blows can be delivered upon it by the practiced hand from any given direction to obtain the best possible results in a faithful tracing of the line to be followed.

For use in following straight lines, or a line described a long curve, for example, the form shown in Figure 3 serves well, this being naturally the more simple form of tool.

It is clear that a better control of a tool for the purpose of cutting sheet metal results from having an abutment in the vicinity of the cutting point rather than in driving such a tool by blows delivered upon its end distant from such cutting point and herein lies the value of my improved tool together with the drag of the nose 2 upon the work rather than a push lengthwise upon one end of a tool whose other end or point is forced into the work. In locating the abutment portions 4, 5 at that edge of the tool opposite the edge having the recess formed by the nose 2 the leverage of delivered hammer blows tending to turn the tool about its longest axis is of assistance in following curved lines.

I claim:—

1. A tool for the purpose described including in its construction a long thin and flat blade-member having at one end a hook-like extension lying in the plane of the tool and terminating in a point directed toward a line paralleling one edge thereof in position to perforate the work to be acted upon, the inner surface of said extension, or that facing the opposite end of the tool, being concave in regular outline and having a transverse flat face lying substantially at right angles to the sides of the latter and terminating in square corners at said sides.

2. A tool for the purpose described including in its construction a blade-member having at one end a hook-like extension lying in the plane of the tool near one edge thereof and including a terminal point directed toward a line paralleling said edge in position to perforate the work to be acted upon, the inner surface of said extension, or that facing the other end of the tool, being concave in regular outline and having a flat face terminating in sharp corners at the sides of the tool and both acting to sever the work and remove a ribbon or strip thereof.

3. The invention according to claim 1 wherein the tool has a bulbous abutment portion for receiving hammer blows in the direction of the length of the tool, the same being nearest the
5 end of the latter having said hook-like extension.

4. The invention according to claim 1 wherein

the terminal end of the blade-member constituting the hook-like extension recedes from the point of the latter toward both the opposite edge and toward the opposite end of the member.

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