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W. D. SEIGH

2,295,693

ABRADING IMPLEMENT

Filed April 7, 1942

Fig. 1

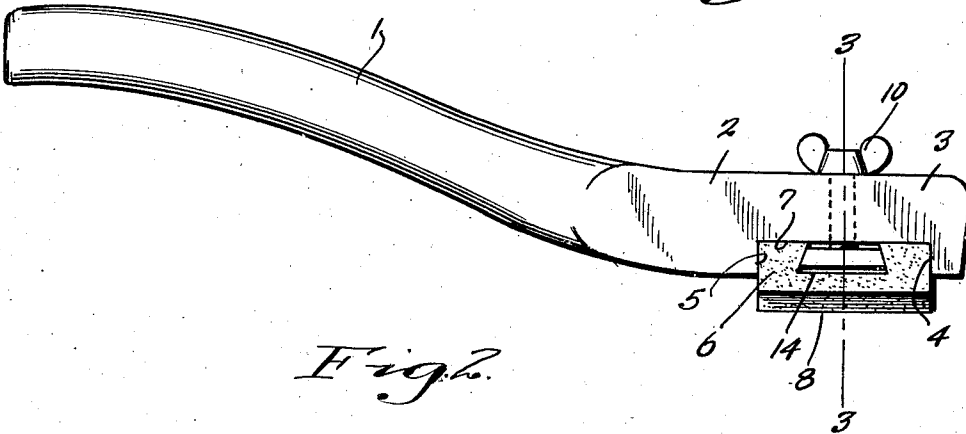


Fig. 2

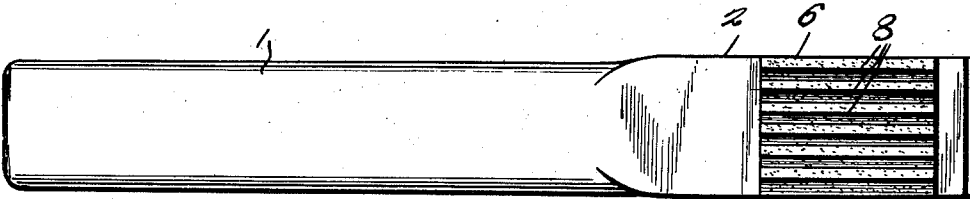


Fig. 3

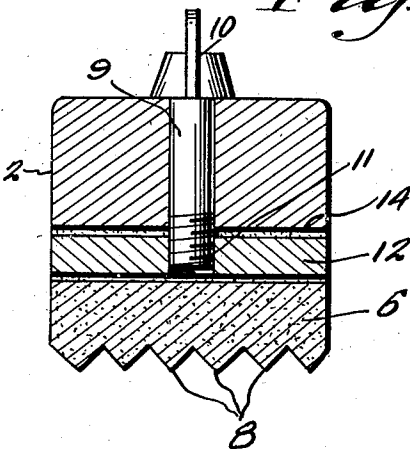
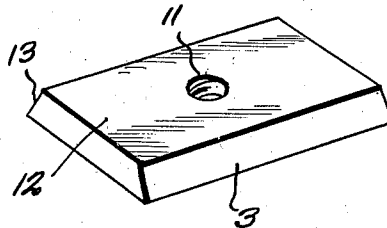


Fig. 4



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ABRADING IMPLEMENT

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Application April 7, 1942, Serial No. 438,025

1 Claim. (Cl. 51—205)

My invention relates to improvements in abrading implements for dressing down the screw threads of threaded dies and taps.

In the use of threaded dies and taps, it frequently occurs that there is a building up of foreign matter on the threads. Also, when the dies or taps are ground, a burr or fin is sometimes left on the threads.

Having the foregoing in mind, it is the principal object of my invention to provide a simply constructed, inexpensive and easily applied abrading implement for dressing down such threads cleanly and quickly to remove burrs, fins, and the like therefrom.

Other and subordinate objects are also comprehended by my invention, all of which, together with the precise nature of my improvements, will be readily understood when the succeeding description and claim are read with reference to the drawing accompanying and forming part of this specification.

In said drawing:

Figure 1 is a view in side elevation of my improved abrading tool in its preferred embodiment.

Figure 2 is a view in top plan,

Figure 3 is a view in transverse section taken on the line 3—3 of Figure 1, and

Figure 4 is a view in perspective of the clamping plate.

Reference being had to the drawing by numerals, my improved implement in the illustrated embodiment thereof comprises a handle 1 of bar-like form and compound curvature for convenient gripping and which terminates in an elongated, substantially straight head 2 of rectangular cross-section. The bottom face of the head 2 is rabbeted to provide a rectangular flat bottomed socket 3 therein open at the sides of the head and having front and rear walls 4, 5 extending across said face at right angles thereto.

Fitted in the described socket 3 to extend out of the same, below the head 2, is a rectangular abrading, or grinding, member 6, preferably of stone, and which is provided with a flat top 7 and a bottom face having straight ribs 8 thereon extending from front to rear of the member and of V shape in cross-section to fit in between the threads, not shown, of dies or taps.

The ribs 8 are spaced apart in accordance with the pitch of the threads to be dressed, it being understood that members 6 with differently spaced ribs 8 are comprehended by my invention for substitution in the head 2 according to the pitch of the threads to be dressed.

The described abrading, or grinding, member 6 is detachably secured in the socket 3 by the following means:

A set screw 9 having a wing-type head 10 is extended downwardly through the head 2 in the center of the socket 3 for turning into a center bore 11 in a rectangular clamping plate 12 which is provided with beveled front and rear sides 13 fitting in a dovetail groove 14 in the top face of the member 6 and extending transversely thereof.

Obviously, by tightening the set screw 9, the clamping plate 12 may be drawn into wedging engagement with the side walls of the groove 14 to clamp the member 6 tight against the bottom of the socket 3 and thereby rigidly attach said member to said head 2. Conversely, by loosening the set screw 9, the clamping plate 12 may be loosened in the groove 14 so that the member 6 may be slid out of the socket 3 and another member substituted therefor.

In using the described implement, the ribs 8 are fitted into the threads to be dressed and the implement reciprocated until the threads are properly dressed down and cleaned.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly, the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the subjoined claim.

What I claim is:

An abrading implement for dressing down screw threads comprising a bar-like handle terminating in a flat bottomed head having a socket in said bottom provided with front and rear walls extending at right angles to said bottom, a rectangular abrading stone fitting in said socket and provided with bottom ribs extending longitudinally of the implement and of V shape in cross-section for fitting between threads to be dressed, and means to detachably secure said stone in said socket, said means comprising a dovetail groove extending transversely across the top of said stone, a clamping plate fitting in said groove and having beveled edges for wedging coaction with the sides of said groove under adjustment of the plate toward said head, and a set screw extending through said head and threaded into the center of said plate for adjusting the same upwardly.

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