Sept. 8, 1953 J. B. WEEMS 2,651,108

BLADE AND TOOL HOLDER

Filed July 30, 1947

Fig. 6.

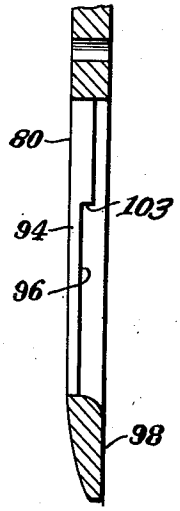


Fig. 5.

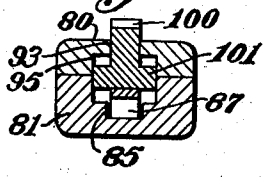


Fig. 1.

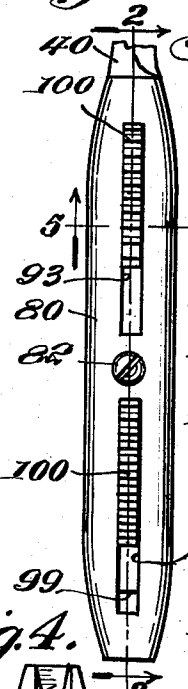


Fig. 2.

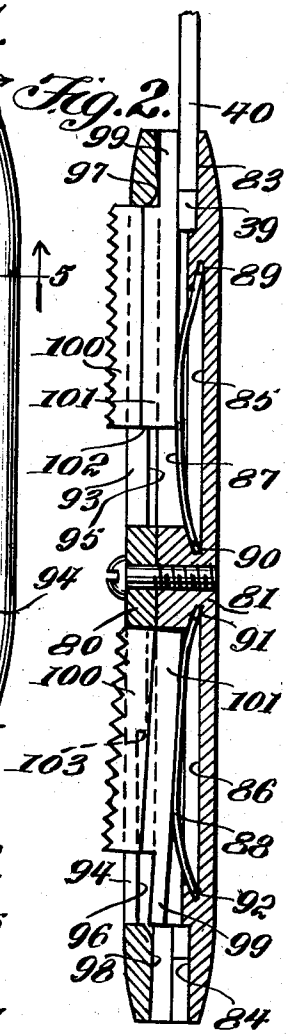
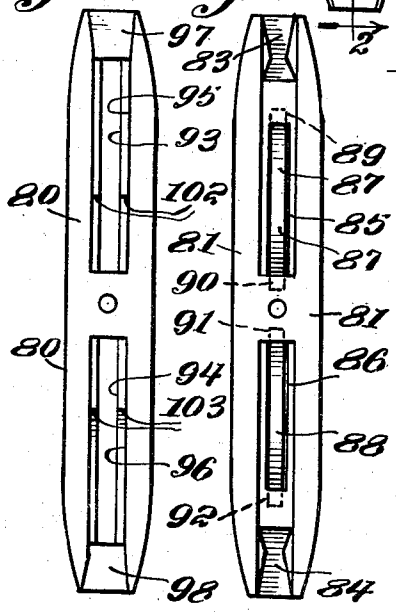


Fig. 3. Fig. 4.



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BLADE AND TOOL HOLDER

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Application July 30, 1947, Serial No. 764,625

1 Claim. (Cl. 30—337)

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This invention relates to holders and handles for tools, blades, knives, and the like of the type in which the blades are removably clamped between sections of a holder, and in particular a holder having sockets in the ends in which shanks at the ends of blades may be inserted and clamped by manually actuated sliders in the holder.

The purpose of this invention is to provide a holder for blades and the like in which blades may readily be removed and replaced and in which the blades are rigidly secured in the position in which they are used without screws or other attaching means requiring the use of tools.

Tool bits and blades and particularly small knife blades are difficult to hold rigidly in handles and where blades of this type are removably mounted they work loose and damage materials being cut. With this thought in mind this invention contemplates a holder having blade receiving sockets in the ends with slidable clamping elements for positively securing the blades in the sockets, or matrices, and resiliently actuated latch means for locking the clamping elements in the positions of clamping the blades.

The object of this invention is to provide a holder for blades and the like that may be actuated to clamp or release the blades by the average layman and without the use of tools, such as a screw driver, or the like.

Another object of the invention is to provide a holder for blades and the like that may be actuated with one hand while blades are removed and inserted with the other.

Another object of the invention is to provide a blade and tool holder having releasable clamping means in which means is provided for locking the clamping means in the position of holding the blade until manually released.

A further object is to provide a holder for removably holding blades and the like which is of a simple and economical construction.

With these and other objects in view the invention embodies a holder formed of two substantially complementary sections with blade holding sockets in the ends, means clamping blades in the sockets, and resilient means frictionally holding the clamping means.

This invention also consists in certain other features of construction, and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings, and specifically pointed out in the appended claim.

Other features and advantages of the invention

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will appear from the following description taken in connection with the drawings, wherein:

Figure 1 is a view showing a front elevation of the holder.

Figure 2 is a longitudinal section through the holder taken on line 2—2 of Figure 1.

Figure 3 is a view showing the inner or under surface of the upper section of the holder.

Figure 4 is a similar view showing the inner or upper surface of the lower section thereof.

Figure 5 is a cross section through the holder taken on line 5—5 of Figure 1.

Figure 6 is a detail showing a longitudinal section through an end of the upper section of the holder with the other end broken away and other parts omitted.

Referring now to the drawings wherein like reference characters indicate corresponding parts the blade and tool holder of this invention is formed with an upper section 80 and a lower section 81 and the two sections are rigidly held together by a screw 82. The ends of the lower section are provided with sockets 83 and 84, and between the sockets and center of the holder are recesses 85 and 86 with springs 87 and 88 therein, and the ends of the springs are held in notches 89, 90, 91, and 92, in the ends of the spring retaining lower portions of the recesses. The upper section 80 is formed with slots 93 and 94 communicating with recesses 95 and 96 in the inner surface thereof, and beveled surfaces 97 and 98 are provided at the ends of the recesses which wedge tongues 99 of sliders 100 against blades in the sockets 83 and 84 as illustrated in Figure 2. The sliders 100 are similar and each is provided with an enlarged base 101 and a web having a knurled outer surface as shown. The sliders are urged outward by the springs 87 and 88 and may be pressed inward to operative positions to clamp or release the blades. The sliders are locked in the position as shown in the upper part of Figure 2, wherein the blade is clamped in operative position, by notches 102 and 103 into which the inner ends of the sliders are snapped by the springs. To release the blades the sliders are pressed inward until the inner ends move out of the notches 102 and 103, wherein they are free to slide inward.

The blade and tool holder of this invention, therefore, includes a handle with upper and lower sections in which blade holding sockets are provided in the ends, and in which means is provided for rigidly clamping blades in the sockets, and the clamping means is adapted to be readily actuated to release the blades.

It will be understood that other modifications

may be made in the design and arrangement of the parts without departing from the spirit of the invention.

What is claimed is:

In a cutting blade handle, the combination which comprises an elongated body having upper and lower sections, the lower section being rectangular-shaped in cross section and the side and bottom surfaces thereof tapering toward the ends, and the upper section also being rectangular-shaped in cross section and having tapering surfaces on the ends of the sides and upper surface, said lower section having an elongated recess therein with a blade holding socket positioned at the outer end thereof and located at the end of the handle, said socket being in communication with the recess, said recess also having a spring retaining lower portion with notches in the ends positioned in the inner part thereof, said upper section having an elongated slot therein and said slot positioned to register with the recess of the lower section, a slider positioned in the recess of the lower section, said slider having a knurled upper surface extended through the slot of the upper section, and said slider having a tongue positioned to extend over said blade holding socket to wedge a blade in the socket, an arcuate spring in said spring retaining lower portion of the recess with the ends thereof in said notches and with the intermediate part thereof bowed upwardly frictionally retaining said slider, selectively, with the tongue in blade wedging and in blade releasing positions, and a fastener securing the upper section to the lower section.

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