(No Model.)

G. B. MALETTE.

SCREW PLATE.

No. 263,550. Patented Aug. 29, 1882.

Fig. 1.

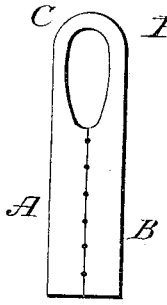


Fig. 2.

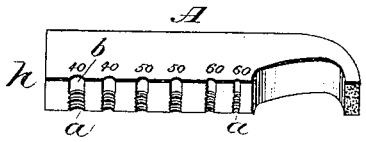


Fig. 3.

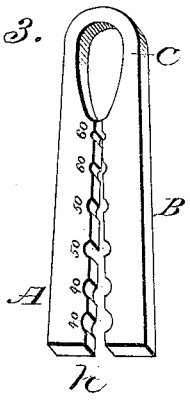


Fig. 4.

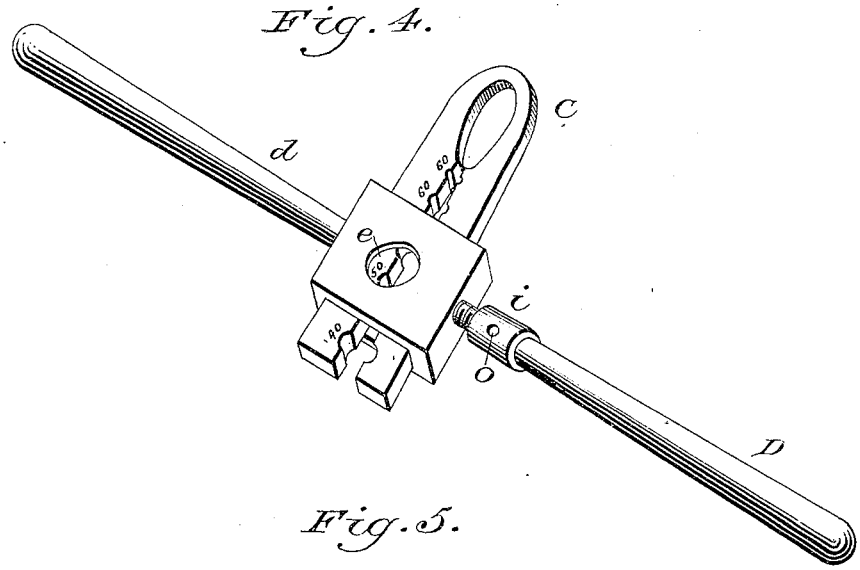
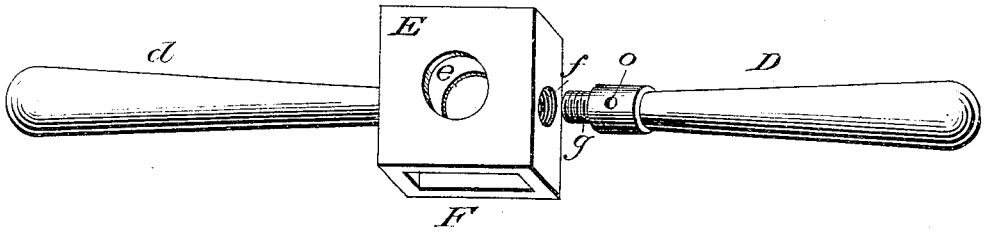


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE B. MALETTE, OF WATKINS, NEW YORK.

SCREW-PLATE.

SPECIFICATION forming part of Letters Patent No. 263,550, dated August 29, 1882.

Application filed August 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. MALETTE, of Watkins, county of Schuyler, and State of New York, have invented certain new and useful Improvements in Screw-Plates; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of screw-plates in which a spring is provided for separating or opening the dies, supplied with a stock, both of which consist in a novel construction and arrangement of parts, as hereinafter more fully set forth and claimed, by which a simpler, cheaper, and more effective device of this character is produced than is now in ordinary use.

In the drawings, A B represent the body of the dies, and C the spring; and E, the body of the stock; D *d*, the handles; *g*, the screw; E, the opening, and *f e e* the holes.

The stock is formed in two pieces, which are attached together by turning the screw *g* of the handle D into the hole *f*. The stock is constructed by being forged or cast, the handle *d* and the body E being formed in one piece, the opening F being made the exact size and shape to admit the dies when expanded by the spring C. The holes *e e* are then drilled through the top and bottom plate, through which the blanks pass when inserted through the dies in cutting a thread. The hole *f* is then drilled and tapped to admit the screw *g*. The handle is then made with the screw *g*, the body of which being made to fit the hole *f*. A hole, *o*, is then drilled through the collar, into which a lever may be inserted to turn the handle.

The body of the die is formed in two sections or halves, which are connected by the spring C, and all of the parts A B C integral or in one piece. In the construction of the die a bar of steel of the requisite form and size is reduced in thickness a portion of the length by milling or forging to form the spring C. It is then straightened and planed or otherwise properly finished, and the part which has been reduced heated and bent until the sections A B are brought into parallelism, as shown in Figure 1. The sections A B are then inserted in the opening F of the stock E and the screw *g* of the handle D turned into the hole *f* against the side of section B until the sections A B are firmly pressed together, as shown in Fig. 1. They are then drilled on the line of intersection with a series of regularly-graded holes, *a a*, which are tapped or threaded to form dies, as seen in Fig. 2, the smallest hole being nearest the spring C and the largest nearest the opposite end, *h*. These holes are flared or countersunk at their entrances to form the guides *b*, Fig. 2. The object of the guides is to enable the screw-blanks to be properly inserted in the dies. When the holes *a a* are drilled and tapped and the guides *b* formed as described, the sections A B are taken from the stock and separated slightly and held apart by a wedge or in any convenient manner and the plate properly tempered or hardened.

It will be understood that in hardening the dies the spring C is not included, and that the spring should be so formed and tempered that when inserted in the stock and the screw *g* turned outwardly by the handle D, Figs. 4 and 5, the sections A B will be thrown apart by the expansive action of the spring C, as shown in Fig. 3.

When in use the dies are placed in the stock and so adjusted that any pair of dies of the size desired may be directly in the center of the holes *e e*, in a manner which will be readily understood by all conversant with such matters without a more explicit description.

As the dies are in a single piece and bored and tapped in the position required when in use, each pair of dies always match exactly, making the finest and most perfect thread.

Having thus explained my invention, what I claim is—

1. The die-plate consisting of the parts A, B, and C, integral or in one piece, substantially as shown and described.

2. The holder consisting of the body E and the handles D and *d*, substantially as shown and described.

In testimony that I claim the foregoing as my invention I hereunto set my hand, in presence of two witnesses, this 21st day of July, 1882, at Watkins, New York.

GEORGE B. MALETTE.

Witnesses:

M. A. GUTHRIE,

DYER ROBINSON.