(No Model.)

E. N. PARKER.

TWEEZERS.

No. 583,312. Patented May 25, 1897.

Fig. 1

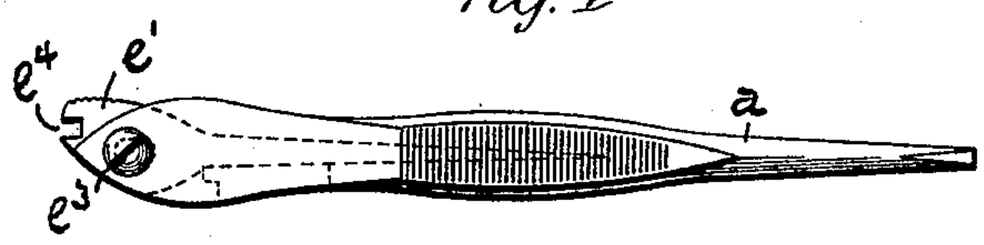


Fig. 2.

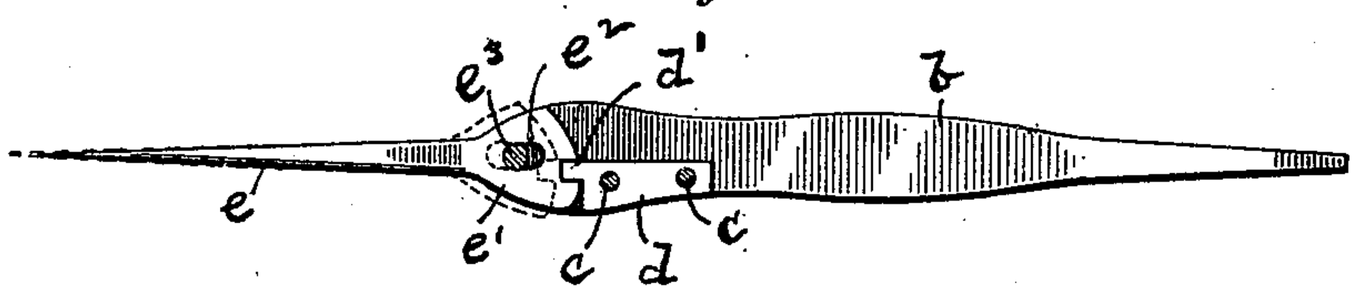
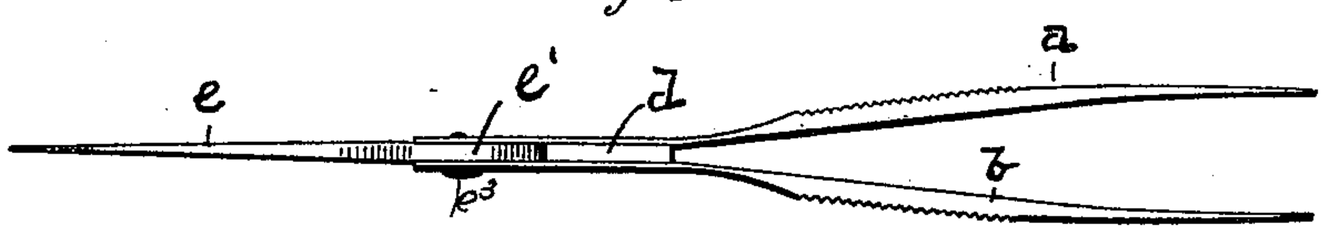


Fig. 3.



Witnesses:
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TWEEZERS.

SPECIFICATION forming part of Letters Patent No. 583,312, dated May 25, 1897.

Application filed August 21, 1896. Serial No. 603,505. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS N. PARKER, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Tweezers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of tweezers used by printers which have attached thereto a bodkin capable of being moved from its operative position to one in which it is housed in such manner as to permit the tool to be carried in the pocket without danger of injury to person or clothing.

The object of the invention is to provide a tool of this nature having very simple and inexpensive means for positively locking the bodkin in its operative position and for releasing the same to enable it to be swung to its inoperative position.

To this end my invention consists in the tool constructed and operated as hereinafter fully described, and particularly pointed out in the claim.

Referring to the drawings, in which like letters designate like parts in the several views, Figure 1 is a side view of a tool embodying my invention with the bodkin shown in its inoperative position by broken lines. Fig. 2 is a similar view with one of the jaws of the tool removed and the bodkin in its operative or locked position. Fig. 3 is an edge view with the bodkin in its operative position.

The letters *a* and *b* designate, respectively, the two jaws of the tweezers, which jaws are slightly bowed and are milled or roughened on their inner surface at their front end and on their outer surface substantially midway between their ends, as is common in printers' tweezers. Near their rear end said jaws are united by rivets *c*, passing through the interposed bridge-block *d* in the usual manner.

The letter *e* designates the bodkin, which is provided at its inner end with the fan-shaped head *e'*, containing the hole e^2, elongated in the plane of the axis of the bodkin, through which passes the pivot-screw e^3, said screw passing through a hole in one of the jaws *a b* at their extreme rear end and entering a tapped hole in the other jaw, by which means it is adapted to secure an adjustment of the degree of pressure which said jaws exert against the sides of the head *e'* of the bodkin. By reason of the elongation of the hole e^2 the bodkin is rendered capable of a limited movement in its axial plane in addition to its swinging movement about the screw e^3 as a center, and such first-mentioned movement is utilized to effect the locking of the bodkin in its working position and its release therefrom by providing the head *e'* thereof with a notch or recess e^4, the sides of which are parallel with the axis of the bodkin, and by providing the bridge-block *d* with a projection *d'*, adapted to enter said notch or recess, as shown in Fig. 2, when the bodkin is swung to its operative position and thrust rearwardly until the screw e^3 bears against the outer end wall of the oblong hole e^2.

In its inoperative position the bodkin occupies the position shown by broken lines in Fig. 1, in which position it is completely housed between the jaws *a b* in such manner that the tool can be carried in the pocket without danger of injury to person or clothing. To change it to its operative position, the thumb or finger is placed against the projecting edge of the head *e'*, which edge is milled for the purpose, as shown, and the bodkin is swung to the position shown by broken lines in Fig. 2 and is then thrust inwardly in the line of its axis, thereby causing the projection *d'* on block *d* to enter the notch or recess e^4. The bodkin is thereby securely locked in its working position, and as it can be released only by a direct outward movement in the line of its axis it follows that any lateral strain exerted against its point will fail to secure such release. I thus provide a bodkin which cannot become loosened from its operative position by any use to which such tools are put.

To return the bodkin to its inoperative position, it is necessary simply to exert a slight outward pull thereon to move it to the position shown by broken lines in Fig. 2 and then swing it back to the position shown in Fig. 1.

In addition to the convenience with which the bodkin can be operated and the security with which it is locked in its working position it will be observed that by causing the

bridge-block d to also perform the function of one member of the locking mechanism I greatly simplify and lessen the cost of the locking mechanism.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination with the tweezer-jaws a b and their interposed bridge-block d provided with the projection d', of the bodkin e having its head e' provided with the elongated hole e^2 and notch or recess e^4 disposed as described, and pivot-screw e^3 uniting said jaws and passing through said hole e^2 of the bodkin, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ERASTUS N. PARKER.

Witnesses:
WM. H. CHAPMAN,
FRANK J. DEMOND.