

(No Model.)

W. F. STANLEY.
PEN EXTRACTOR.

No. 479,959.

Patented Aug. 2, 1892.

Fig. I.

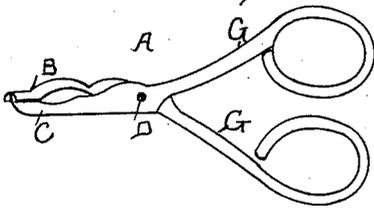


Fig. II.

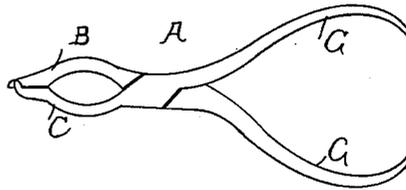


Fig. III.

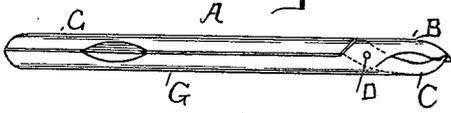


Fig. IV.

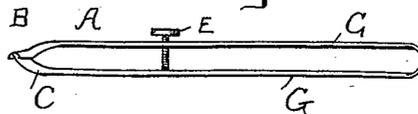


Fig. V.

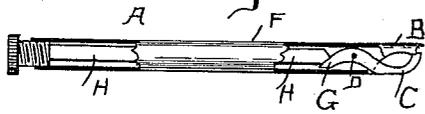


Fig. VI.



Fig. VII.



Fig. VIII.

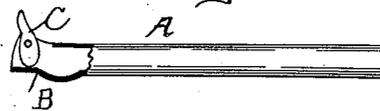


Fig. IX.

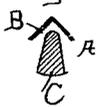


Fig. X.



Fig. XI.



Fig. XII.



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WILLIAM FORD STANLEY, OF SOUTH NORWOOD, ENGLAND.

PEN-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 479,959, dated August 2, 1892.

Application filed December 5, 1891. Serial No. 414,129. (No model.) Patented in England November 23, 1888, No. 17,078.

To all whom it may concern:

Be it known that I, WILLIAM FORD STANLEY, a subject of the Queen of Great Britain, and a resident of South Norwood, England, have invented certain new and useful Improvements in Pen-Extractors, (for which I have obtained a patent in Great Britain, No. 17,078, dated November 23, 1888,) of which the following is a full, clear, and exact specification thereof.

This invention has for its object the extraction of a metal writing-pen from its holder to enable a new pen to replace it. The means employed is by the use of a pair of jaws (which may be toothed or plain) being brought down upon the pen or the upper part thereof, so as to hold it tightly, and of a convenient handle to draw the pen out. By preference one of the jaws will be made hollow and the other round, so that the pen approximately fits the jaws, although this is not absolutely necessary, as a flat jaw and a narrow jaw answer the same purpose very well. The jaws are brought together, either by a crossing-joint, as with scissors or pliers, or they may be brought together by means of a wedge or a screw or an eccentric cam, the important point being that the nibs are held firmly for the extraction of the pen. The jaws are preferably made hollow or recessed near the joint, so as to insure the points coming into contact with the pen near the holder and also to clear any projecting parts that may be at the point of a pen, such as globular, pointed reservoir, or fancy-shaped pens.

In order to more fully describe my invention, I will refer to the accompanying drawings, in which—

Figure 1 shows a simple form of pen-extractor having scissor joint and handles and a curved upper jaw and narrow straight lower jaw, both recessed near the joint, so as not to interfere with any fancy-pointed pen and also to be clear of any ink which might remain upon the pen, the jaws being long enough to grip the pen at or near the holder. Fig. 2 shows a similar arrangement, but with plier joint and handles, the jaws being similar in construction. Fig. 3 shows a similar arrangement. Fig. 4 shows the pen-extractor made in one piece with similar jaws; but the part

which forms the handle is made as a spring which springs open, the distance being controlled by the screw, and is closed upon the pen by pressure in the hand or by the screw. Fig. 5 shows the extractor, partly in section, made with similar-shaped jaws; but the lower jaw is jointed and the tail of this is formed first as a wedge and the extreme inner end is thinned off, so as to form a spring which keeps the jaw open, and this lower jaw is closed by turning the screw at the end, which forces the conical end of the inner rod, which is a continuation of the screw, against the wedge-shaped end of the jaw, thus forcing it against the upper jaw. Fig. 6 is a similar arrangement, shown partly in section, but with a vertical screw to screw down direct upon the tail of the lower jaw. Fig. 7 shows another modification, shown partly in section, in which the lower jaw is a spring riveted to the holder, which springs open and is closed by turning the nut at the end, which may have a cap, as shown, to cover the screw. It will be seen that by turning this nut the wedge-ended rod terminating with the screw will be forced in, thus closing the jaws, or drawn out with the opposite result. Fig. 8 is an extractor, partly in section, made with an eccentric cam. With this arrangement the pen has only to be pushed in underneath the cam and when pulled will wedge the cam down sufficient to hold the pen for withdrawal. This cam may be provided with an upper end made of convenient shape to press with the thumb or finger to release the pen after it is withdrawn, and a spring may be fixed to the lower part, so as to press it down upon the pen. Figs. 9, 10, and 11 are end views showing some convenient shapes for the jaws, the gripping-surface of which may be plain or toothed. Fig. 12 is the end view of the eccentric-cam jaws of Fig. 8.

Similar letters refer to similar parts throughout the several views.

Letter A represents the pen-extractor consisting of the fixed jaw B and the movable jaw C, pivoted at D. In Fig. 1 these jaw arms and handles G extend rearward and are shaped like a pair of scissors. In Fig. 2 the arms are shaped like a pair of pliers. In Fig. 3 these arms or handles G are made to lie

close and form a round similar to a pencil. In Fig. 4 the jaws and arms are made of one piece and drawn together by a set-screw E. In Fig. 5 the fixed jaw is formed out of the holder F, and the movable jaw is pivoted to said holder, and the rear arm G of the same is acted upon by presser-bar H, placed in the interior of the holder and provided with threaded end and thumb-screw.

Fig. 6 is similar to Fig. 5, excepting the movable jaw is acted upon by a set-screw E. The device shown in Fig. 7 is precisely the same as Fig. 5, excepting that the mode of operating the presser-bar H is slightly modified; also, the movable jaw C is secured differently.

Fig. 8 shows the extractor constructed in the shape of a cam-lever placed on a holder. The cam-lever represents the movable jaw C, and the casing represents the fixed jaw B. The upper jaw B is made semicircular or any other shape to accommodate the shape of the pen. (See Figs. 9, 10, and 11.)

By simply pinching the pen between the jaws it can be easily withdrawn from the holder (see Figs. 1 and 2) or held thereto, (see Figs. 3, 4, 5, 6, 7, and 8,) and easily withdrawn

by simply releasing the pressure of the fixed jaw.

The extractor can be made of any suitable material, preferably steel.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

1. In a pen-extractor, the fixed jaw B, with concaved outer end, and the movable jaw C, with inverted-V-shaped end, both jaws pivoted together at D and forming the extended jaws beyond the said pivot-point D into scissor-handles, substantially as and for the purpose set forth.

2. In a scissor-shaped pen-extractor, the fixed jaw B, with concaved outer end, and movable jaw C, with inverted-V-shaped end, both jaws pivoted at D, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of August, 1891.

WILLIAM FORD STANLEY.

Witnesses:

H. L. LALLACK,
GERALD F. BIRD.