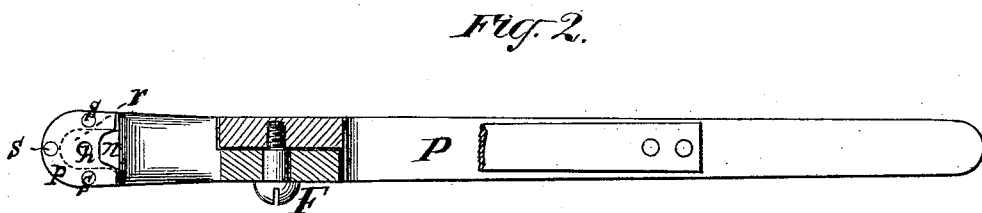
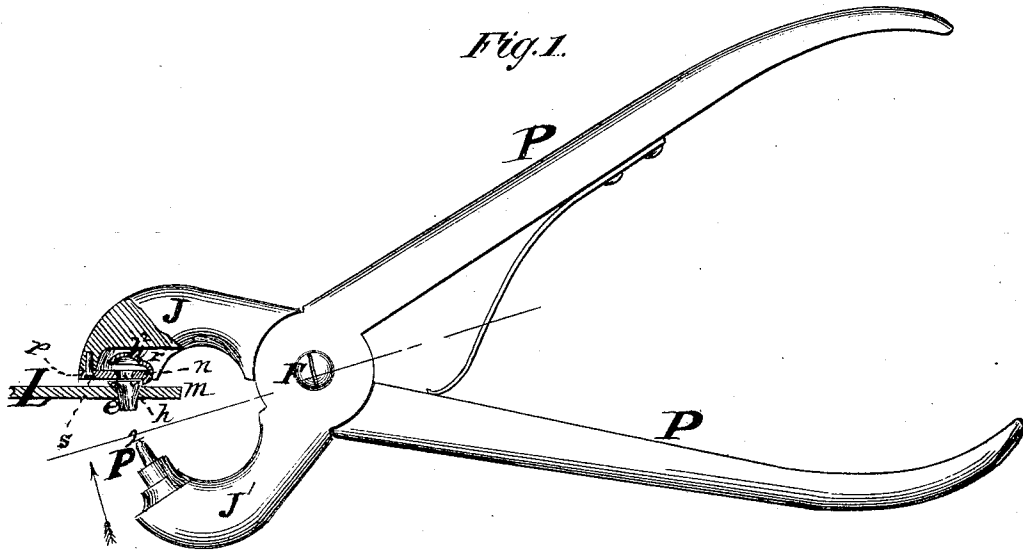


H. DINNING.
EYELET-SETTING INSTRUMENT.

No. 179,281.

Patented June 27, 1876.



Witnesses
John Becker
Chas. Wagner

Henry Dinning
by his Attorney
Brown & Allen

UNITED STATES PATENT OFFICE.

HENRY DINNING, OF NEW YORK, N. Y.

IMPROVEMENT IN EYELET-SETTING INSTRUMENTS.

Specification forming part of Letters Patent No. **179,281**, dated June 27, 1876; application filed January 26, 1876.

To all whom it may concern:

Be it known that I, HENRY DINNING, of the city, county, and State of New York, have invented a new and useful Improvement in Pliers for Securing Eyelet-Hooks in Leather and other materials; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates more particularly to pliers for inserting eyelet-hooks in the uppers of boots and shoes; but it is applicable to the insertion of eyelet-hooks in corsets and other articles.

The invention consists of a novel and peculiar construction and arrangement of parts, which will be fully hereinafter described, and specifically pointed out in claim.

Figure 1 is a side view of my improved pliers with the notched die-guide and gage-plate shown in section, and also a part of the jaw which carries said die-plate broken away to show the construction and operation of the same. Fig. 2 is a view of the under side of the said jaw and notched die, guide, and gage plate.

In the jaw J of the pliers P P, which have their fulcrum at F, I form the recess *r*, the side walls of said recess being preferably at a uniform distance from the outer surface of said jaw. Over the recess *r* I place and fix firmly to the jaw J the die-guide and gage-plate *p*, attaching the said plate to the said jaw by screws *s*, or by rivets or other suitable means. Or I may form the said die, guide, and gage-plate in one piece with the jaw by forging or otherwise.

In the center of said die-guide and gage-plate *p* is formed the hole *h* to admit the entrance of the anvil P^2 attached to the jaw J' , and on the inner side of said plate is formed the notch *n*.

The eyelet-hook *e* h^2 is placed in the usual manner in a hole previously punched in the leather L or other material.

In use the die-guide and gage-plate *p* is placed on the inner side of the hook-part h^2 of the eyelet-hook, and drawn toward the mar-

gin *m* till it abuts against the inner side of the eyelet-hook. The bottom of the notch *n* then prevents the pliers from being drawn any farther toward the edge of the material, and the other sides of the notch not only guide the die-plate to the right position, but prevent any lateral movement of the pliers. The jaw J is thus held in position and gaged by the eyelet-hook itself, and the exact entrance of the anvil P^2 into the eyelet of the eyelet-hook, when the pliers are closed together, as in the ordinary use of pliers, by the muscular action of the hand, is secured, while the eyelet of the eyelet-hook is secured without pressing upon the hook part h^2 and deforming it. The anvil P^2 expands the eyelet of the eyelet-hook, and securely fastens it in the leather or other material.

It will be seen that it is desirable that the die-guide and gage-plate *p* should have the notch *n* formed on the side next the fulcrum F of the pliers, for otherwise the pliers could not be placed upon the eyelet-hook in such a way as to perform so well and conveniently all the functions described, because the margin *m* of the leather L or other material, in which the eyelets are inserted, would interfere with the use of said pliers.

The notched guide-plate possesses several advantages over the square-shouldered plate usually employed, as the bottom of the notch prevents the pliers from being drawn toward the edge of the material, and the sides of the same not only guide the die-plate to the proper position, but prevent any lateral movement of the pliers.

I claim—

The handles P P, formed with the jaws J J' , the one having the anvil P^2 , and the other formed with a cavity, *r*, in its lower edge, in combination with the gage-plate *p*, formed with the notch *n* in its rear end, and arranged over the cavity *r* formed in the jaw J, all as herein shown and described.

HENRY DINNING.

Witnesses:

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