(No Model.)

C. P. FAY.

CUTTING PLIERS.

No. 568,242. Patented Sept. 22, 1896.

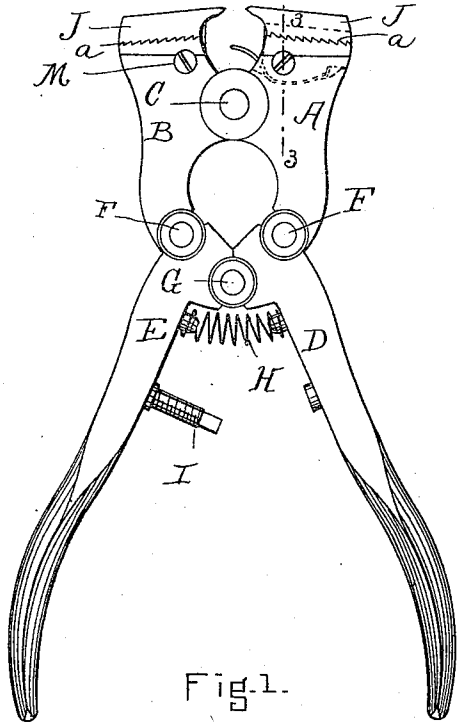

Fig. 1.

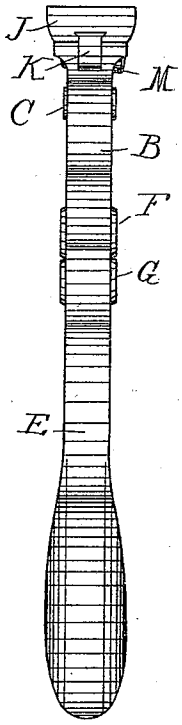

Fig. 2.

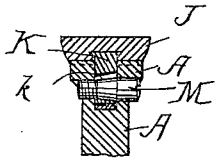

Fig. 3.

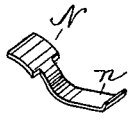

Fig. 4.

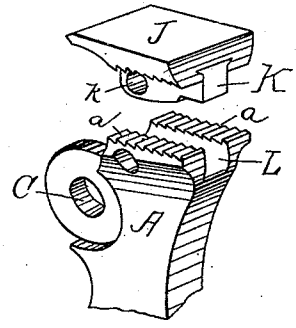

Fig. 5.

Witnesses.
Joseph A. Titus
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Inventor.
Charles P. Fay

UNITED STATES PATENT OFFICE.

CHARLES P. FAY, OF ATHOL, MASSACHUSETTS, ASSIGNOR TO LEROY S. STARRETT, OF SAME PLACE.

CUTTING-PLIERS.

SPECIFICATION forming part of Letters Patent No. 568,242, dated September 22, 1896.

Application filed September 10, 1894. Serial No. 522,591. (No model.)

To all whom it may concern:

Be it known that I, CHARLES P. FAY, of Athol, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Cutting-Pliers, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of this invention is to provide cutting-pliers with jaws which can be readily removed for grinding and adjusted in position to compensate for wear or breakage of the cutting edge requiring either jaw to be set farther forward.

Another object is to furnish a spring-guard over the joint adjacent to the cutting edges to avoid breaking said edges by their wedging action, which occurs in cutting a stiff wire when its end bears against the joint.

The feature which especially characterizes my tool, however, is the removable jaws furnished with fine notches or corrugations engaging with similar surfaces on the head of the implement and clamping means to secure the parts in place when adjusted to the desired position.

In the drawings, Figure 1 is a side elevation, and Fig. 2 an edge view, of my improved implement. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a perspective view of the elastic guard. Fig. 5 is a like view of part of the frame or head of the tool with the jaw and its clamp detached.

A and B are the two pivoted members of the head of the implement joined to each other by the pivot C. D and E are the operating levers or handles connected to the members A B by pivots F and pivoted to each other at G. This construction gives a well-known and very powerful compound leverage. (See Fig. 1.) A coiled spring H is interposed between the levers D E, keeping them normally spread. An adjustable projecting screw-threaded bolt I is placed between the handles D E to limit their closing movement according to the position of the jaws as they may be adjusted. These parts, broadly, I do not claim; nor do I limit my invention to the precise construction of the frame or body of the tool.

The cutting-jaws J, of fine steel, are finely notched or corrugated transversely on their under surfaces to engage with like notches or corrugations *a*, formed on the upper or outer ends of the heads A B of the tool, so that said jaws or either of them may from time to time be set farther forward in case of wear or breakage requiring regrinding and readjustment. (See Figs. 1 and 5.) Figs. 2, 3, and 5 show the best means I have devised for quickly and securely uniting the jaw to its head. A spline or clamp-piece K is dovetailed into the under side of the jaw and enters a central recess L formed for it in the end of the head A B in the plane of movement of said parts. A transverse screw M, having a centrally-tapering body, passes through the walls of the head each side of said recess and through a tapering hole *k* in said spline or clamp-piece, the tapering part of the screw thereby drawing the clamp downwardly and holding the jaw firmly upon the notched surface of the head. Withdrawing said screw releases the clamp and permits it and the jaw to be removed. The clamp then slides out, and the jaw may be ground repeatedly, so long as two of its notches remain, or a new one may be substituted at any time, the old frame being intact.

The spring-guard N, punched from thin sheet steel or brass, has a narrow neck *n*, shaped to fit into the recess L in the head A or B below the spline or clamp K, and turned up slightly at the end to prevent it from slipping out. Its broad flat head projects forward between the jaws, as in Fig. 1, where it forms a yielding stop for the end of the rod or wire being cut off, and prevents breaking the cutting edges so liable to occur when the wire end bears solidly against rigid parts adjacent thereto.

I claim as my invention—

1. In cutting-pliers, the pivoted head or frame with actuating-handles pivoted to each other and also to said head, so as to act as compound levers, in combination with cutting-jaws transversely notched or corrugated on their under surfaces to engage successively in like notches or corrugations on said head, an interposed connecting-piece recessed into said head and jaws in the plane of their movement, and with suitable clamping means, substantially as set forth.

2. The pivoted and transversely-corrugated members forming the head A B, provided with central recesses L, and the jaws J, similarly corrugated and having a dovetail groove in their under surfaces, in combination with the spline or clamp K fitting said groove and recess and the taper-bodied screw M serving to secure the parts when adjusted, substantially as set forth.

3. In cutting-pliers, the pivoted head and actuating-levers and the cutting-jaws secured to said head, in combination with the spring-guard N having a neck *n* adapted to enter a recess in the head and to be secured therein by the jaw-fastenings, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 6th day of September, A. D. 1894.

CHARLES P. FAY.

Witnesses:
JOSEPH A. TITUS,
HENRY R. VAILLE.