(No Model.)

T. D. HOTCHKISS.

CUTTING PLIERS.

No. 260,395. Patented July 4, 1882.

Fig. 1.

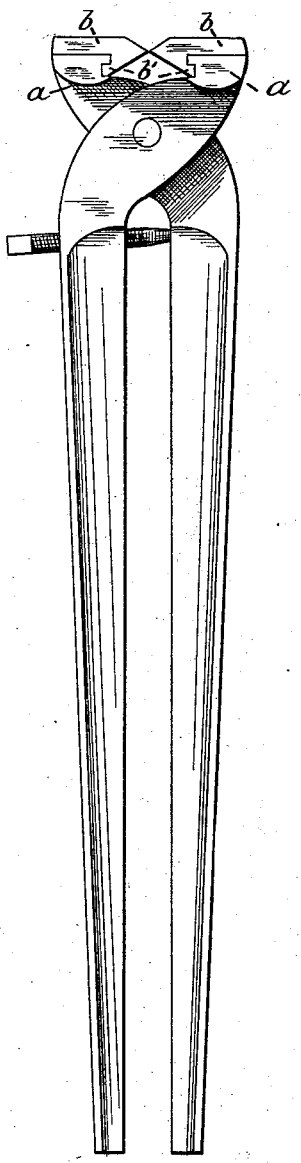


Fig. 2.

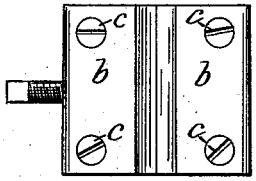


Fig. 3.

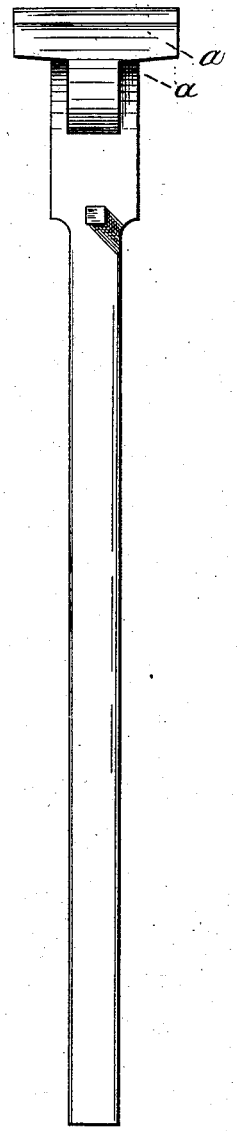
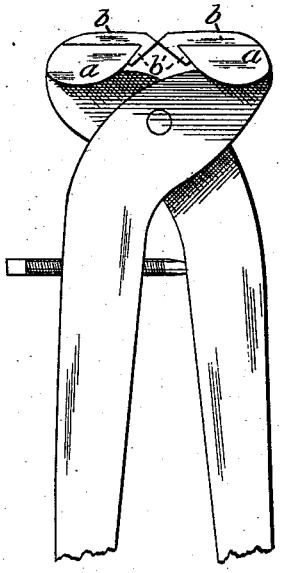


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

TIMOTHY D. HOTCHKISS, OF HIGGANUM, CONNECTICUT.

CUTTING-PLIERS.

SPECIFICATION forming part of Letters Patent No. 260,395, dated July 4, 1882.

Application filed November 3, 1881. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY D. HOTCHKISS, of Higganum, in the county of Middlesex and State of Connecticut, have invented a certain new and useful Improvement in Cutting-Pliers, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is a side view of a pair of pliers constructed in accordance with my improvement. Fig. 2 is a top view of same. Fig. 3 is a view of same turned one-quarter around from the position shown in Fig. 1, a position or view that may be termed an "edge" view. Fig. 4 shows a modification.

The improvement is in that class of pliers which has removable knives or blades of steel for doing the cutting, carried upon iron bases or handles, and is in that more limited class of such pliers where the removable cutting-blades hook over the inner edge of the base; and the improvement consists in certain details of construction which result in certain advantages.

The letters *a* and *a* denote the two handles of the pliers, which are pivoted together in the usual manner, or, rather, *a* and *a* denote the upper parts of such handles, which upper parts form the bases to which the removable cutting-blades are attached.

The letters *b b* denote the removable steel blades, the fronts of which are made with the return-leaf *b'*, which hooks over the correspondingly-shaped front of the base *a*. This return-leaf *b'* extends the whole width of the blade *b*, a feature wherein these blades differ from those on the tools most nearly resembling this in the prior art, and this difference is very important in the additional strength it affords my tool, the backward and upward pressure on the removable blades being very great in practice. The right-angular form of the projection on the front of the base *a*, and the correspondingly-shaped recess in the removable blade (shown in Fig. 1) is the best shape for the interhooking parts. A shape that will answer, but is not preferred, is illustrated in Fig. 4. These removable blades are fastened to the bases *a* by screws *c* driven vertically from above down through the removable blades into the bases *a*. In the tool most nearly resembling mine, in the prior art, a fastening-screw is driven obliquely upward and forward from the outer and under side of the base through the base into the removable blade. Such prior construction, as compared with mine, has the disadvantage that only a single screw can be used unless the base is made of undue thickness and weight; also, that a thicker steel blade must be used to afford a "bite" for the screw; also, that the screw end is liable to project above the top of the blade in any tightening up of the parts after the tool has been used.

The tool of the prior art, already referred to, has a groove or slot in the bottom of the removable blade from front to rear and a corresponding projection on the base fitting to such groove. My construction obviates the necessity for such groove and projection, saving much expense in fitting, and also allowing the blade to be made thinner and cheaper because of the absence of such.

I claim as my improvement—

In cutting-pliers, the combination of the flat-top bases *a*, the flat-bottomed blades *b*, hooking over the front of the bases, and the fastening-screws *c*, driven from above down through the blades into the bases, all substantially as described.

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