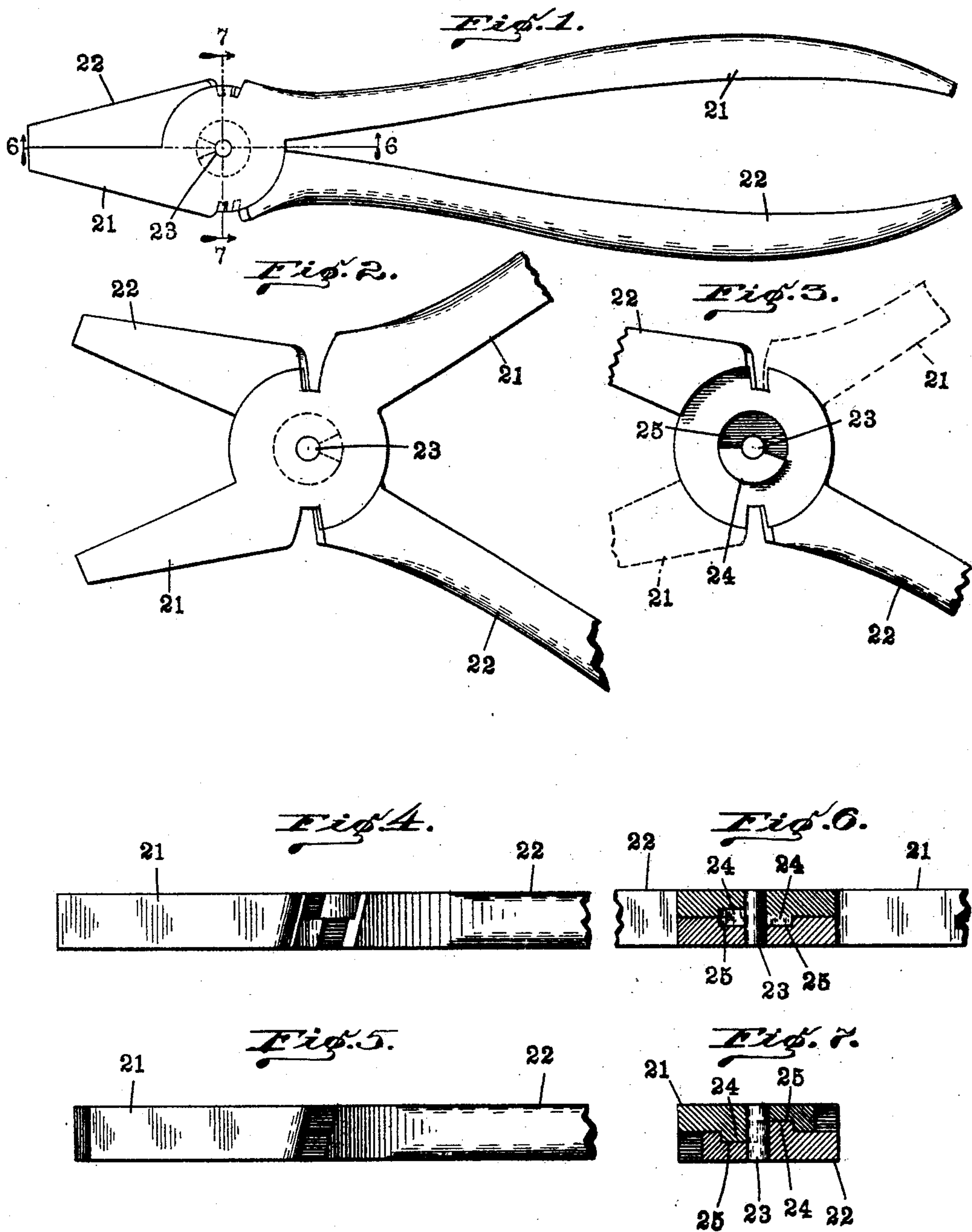


No. 803,437.

PATENTED OCT. 31, 1905.

P. A. SCOTT.  
PLIERS.

APPLICATION FILED SEPT. 18, 1905.



Witnesses  
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# UNITED STATES PATENT OFFICE.

PURL A. SCOTT, OF CHRISMAN, ILLINOIS.

## PLIERS.

No. 803,437.

Specification of Letters Patent.

Patented Oct. 31, 1905.

Application filed September 18, 1905. Serial No. 278,963.

*To all whom it may concern:*

Be it known that I, PURL A. SCOTT, a citizen of the United States, residing at Chrisman, in the county of Edgar and State of Illinois, have invented certain new and useful Improvements in Pliers, of which the following is a specification.

My present invention relates to that variety of pliers formed of two parts secured together by a pivot; and it consists in a construction, by means of which a very simple, inexpensive, strong, and durable pliers may be produced.

My invention embodies a construction in which the two main members are duplicates of each other.

I have shown said invention as applied to that variety of pliers known as "wire-cutting" pliers and as embodying stops by means of which the wire-cutting parts are stopped at a point which brings them into exact registry when open and in which the stop formation is such as to materially add to the strength of the device at the point where it is commonly weakest.

The accompanying drawings illustrate a pair of pliers embodying my said invention.

Figure 1 is a plan view of such a pair of pliers in closed position; Fig. 2, a similar view on a somewhat enlarged scale, the handles being broken away and the open position of the jaws being illustrated; Fig. 3, a similar view of one of the jaws separately, thus showing the form of the contacting surfaces, the position of the other jaw being shown by means of dotted lines; Figs. 4 and 5, side elevations illustrating the closed and open positions, respectively; and Figs. 6 and 7, transverse sectional views at the points indicated by the dotted lines 6 6 and 7 7, respectively, in Fig. 1.

As before indicated, my improved pliers consists of two duplicate members 21 and 22, which are secured together when assembled by a pivot 23. These members are "halved" together at the pivot-point, the boundary-line of the mating portions being concentric to the pivot. Each member also bears upon one side of the pivot a projection in the form of a sector of a circle, whose outer boundary-line is concentric to the pivot, and upon the other side of the pivot a corresponding depression adapted to receive the projection on the other member, the depression being of course enough larger than the projection to permit the members to move about the pivot relatively to each

other to the required extent. As best shown in Fig. 2, each of these projections 24 is upon the same side of the pivot as the outer side of the corresponding handle part, and thus reinforces the jaw at that point, rendering it capable of resisting a much greater strain. This is especially desirable because the cut which forms the jaw of the wire-cutter comes directly opposite this point, and this projection therefore largely compensates for the reduction in strength which said cut would otherwise occasion. The projection 24 on each jaw extends into the depression 25 on the other jaw when the parts are assembled, and these parts are so fitted as to bear against each other, and thus very largely relieve the rivet of strain. They are so positioned and of such size as to also form stops, limiting the movement of the jaws about the pivot, so that the wire-cutter parts shall be in exact registry when the pliers are opened to the fullest extent.

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

1. Pliers composed of two duplicate members having interengaging projections and depressions concentric to the pivot.

2. Pliers composed of two duplicate members having interengaging projections and depressions, the projections being upon that side of the pivot corresponding to the outer side of the handle of the member upon which said projection is formed, thereby reinforcing it at that point.

3. Pliers composed of two duplicate members having wire-cutting jaws formed therein, and interengaging projections and depressions arranged to limit the movement of the members about their pivot and stop said movement at the point when the wire-cutting jaws are in registry.

4. Pliers composed of two duplicate members halved together, a pivot connecting said members, and interengaging projections and depressions concentric to said pivot, said pliers being also provided with wire-cutting jaws.

In witness whereof I have hereunto set my hand and seal, at Chrisman, Illinois, this 14th day of September, A. D. 1905.

PURL A. SCOTT. [L. s.]

Witnesses:

HILL Moss,  
LEO G. SCOTT.