

(No Model.)

P. MEYER.
PLIERS.

No. 460,590.

Patented Oct. 6, 1891.

Fig. 1.

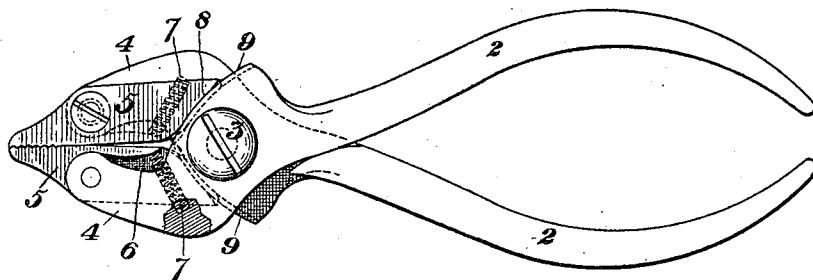


Fig. 3.

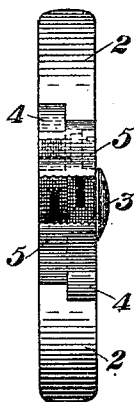


Fig. 2.

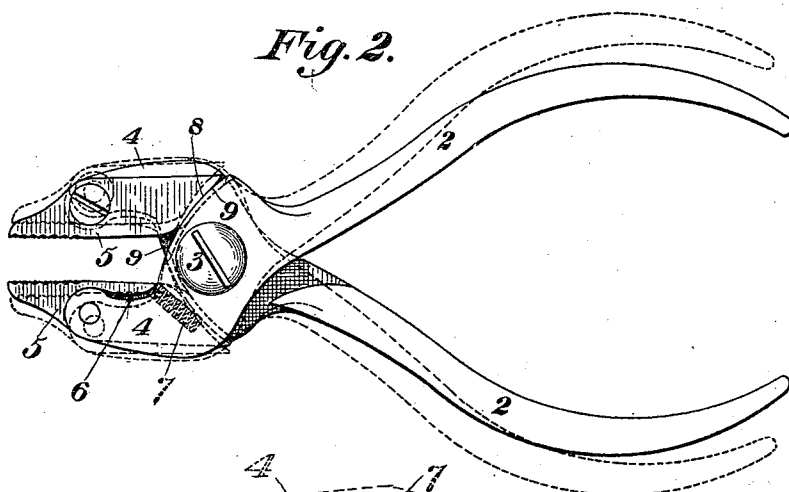
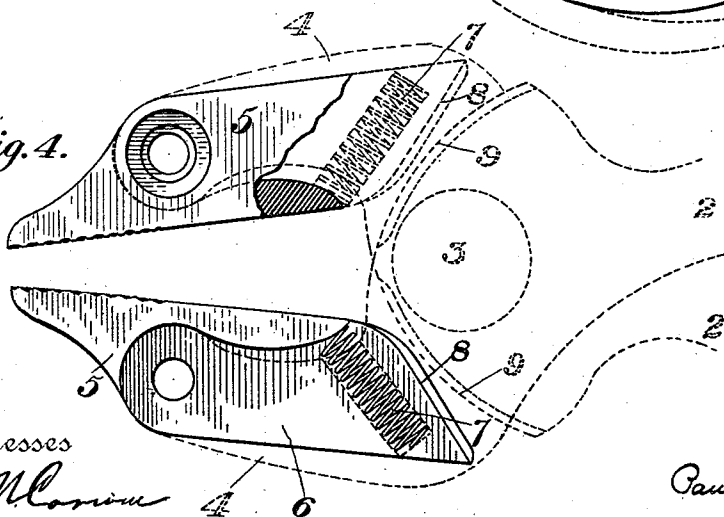


Fig. 4.



Witnesses

H. M. Corbin

H. L. Gill

Inventor

Paul Meyer

by W. Russell & Sons

Attorneys

UNITED STATES PATENT OFFICE.

PAUL MEYER, OF PITTSBURG, PENNSYLVANIA.

PLIERS.

SPECIFICATION forming part of Letters Patent No. 460,590, dated October 6, 1891.

Application filed June 1, 1891. Serial No. 394,713. (No model.)

To all whom it may concern:

Be it known that I, PAUL MEYER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful
5 Improvement in Pliers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

10 Figure 1 represents a side elevation of the pliers in closed position. Fig. 2 is a similar view with the jaws partially opened. Fig. 3 is an end view of Fig. 2, and Fig. 4 is an enlarged side view of the jaws in the position
15 assumed when an article having outwardly-diverging sides is grasped.

My invention relates to that class of pliers in which the parallelism of the gripping-faces is preserved while the jaws are moved apart;
20 and its object is to greatly simplify and improve their construction.

In the drawings, in which like letters of reference indicate like parts, 2 2 represent the lever-handles, pivoted together at 3 and terminating at their extremities in curved portions 4. To these upper portions are pivoted
25 the gripping-jaws 5 5, each jaw having a recess 6, into which fits the curved end of the lever 2. These recesses are located on opposite
30 sides of the jaws, respectively, and against the front face of the recess in each jaw presses a coiled spring 7, which serves to hold the lower part of the jaw in contact with the cam-faces and is located in a suitable recess pro-
35 vided therefor in each lever-arm. The lower

edge 8 of each jaw bears upon a curved cam-face 9 upon the lever carrying the other jaw, and thereby as the jaws are opened their lower ends are forced outward and the jaw-faces kept parallel. Moreover, the jaws will
40 accommodate themselves to articles of various shapes by swinging on their pivots until the inner faces are adjusted to the contour of the article held.

The advantages of my construction are obvious. The parts are few in number, easily made, and of simple construction, while the jaws, by adjusting themselves to the article to be grasped, afford a secure hold upon the same.

Without restricting myself to the specific
50 form of pliers shown and described, what I claim is—

1. A pair of pliers comprising two levers pivoted to each other, a swinging jaw pivoted at the outer end of each lever, and a cam-surface upon each lever arranged to bear upon
55 the jaw pivoted to the other lever, substantially as described.

2. A pair of pliers comprising two levers pivoted to each other and having cam-surfaces, jaws pivoted at the ends of the levers and arranged to be actuated by said cam-surfaces, and springs bearing upon the lower
60 ends of the jaws, substantially as described.

In testimony whereof I have hereunto set
65 my hand this 23d day of May, A. D. 1891.

PAUL MEYER.

Witnesses:

W. B. CORWIN,
H. M. CORWIN.