

W. H. Stevens,
Wire-Working Tool.
No 67,370. Patented July 30, 1867.

Fig. 1.

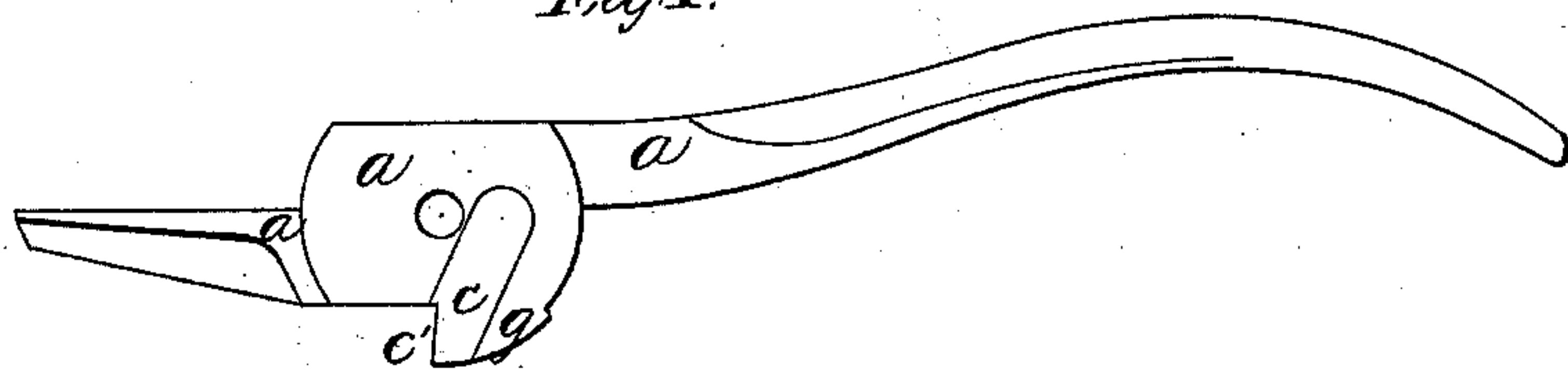
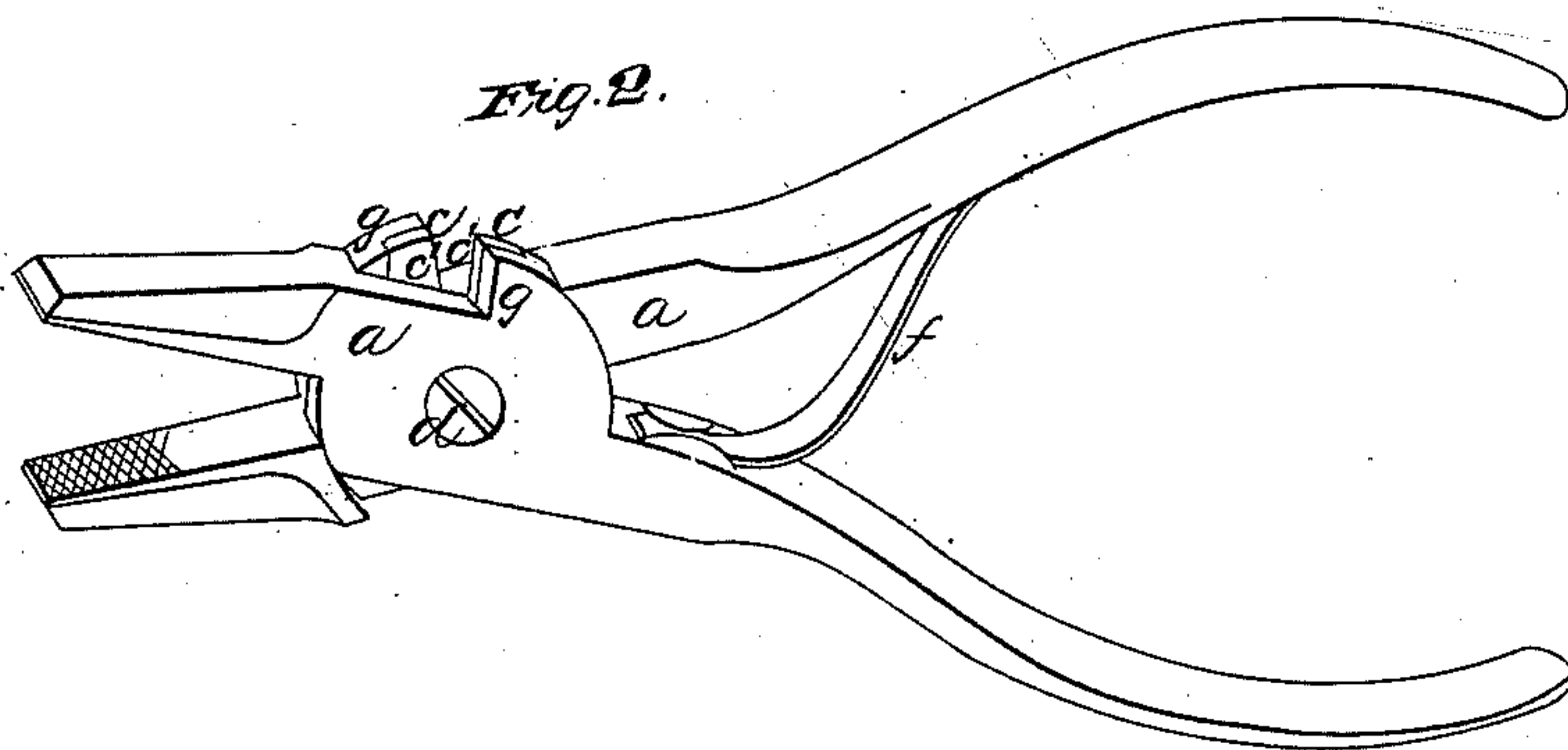


Fig. 2.



Witnesses:
Geo S. Waterman
Peter Quackenbush

Inventor:
W. H. Stevens.

United States Patent Office.

W. X. STEVENS, OF WATERFORD, NEW YORK.

Letters Patent No. 67,370, dated July 30, 1867.

IMPROVED COMPOUND TOOL.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, W. X. STEVENS, of Waterford, in the county of Saratoga, in the State of New York, have invented a new and improved Instrument combining Pliers and Shears; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to accompanying drawings, making a part of this specification, in which—

Figure 1 is a view of one-half of the instrument, showing the inner face of the joint and the form and position of the cutter-blade.

Figure 2 is a perspective view of the instrument complete.

The nature of my invention consists in so shaping the joint of pliers, and so arranging blades of steel therein as to form a pair of shears.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The general construction of my pliers may be in any desired form as to shape of jaws and handles, but to make of them a pair of shears also, I form on each half of the instrument *a a* the projection *g g*, and on the inner faces, or those faces that rest against each other in the joint, I fasten blades of steel, *c c*, each blade to be embedded into its respective projection *g*, and fastened by welding or any suitable process with its outer face in the plane of the joint. The line of the edges *c' c'* of blades *c c* should nearly radiate from centre *d*, on which the halves of the pliers oscillate, and when the plier jaws are open to their full extent the edges *c' c'* should be far enough open to admit as large a wire as is considered safe for the instrument to cut, the wire to be laid across the instrument and parallel to its axis of motion. When the plier jaws are closed the edges *c' c'* should have passed each other enough to make a complete shear. My present process of fastening the cutter into the iron is to cut a slot and insert the steel, as at *c*, fig. 1, and the rounding edges of the steel, as it comes in bars, are sufficiently "dove-tailing" to be held by heading over the iron at the edges of the slot. After heading in the blade *c*, I face it down at the same time that I counterbore to form the joint of the instrument. This process would be unnecessary if the instrument were made of sufficiently good steel to hold a cutting edge. Spring *f*, inserted between the handles to aid in opening the instrument, is fastened by inserting one end in a slot in the handle, and heading the iron over it in a manner similar to fastening the blade. The precise position of the shear blades in the arc of the circle, relative to the pliers, is not essential; but what I claim as my invention, and wish to secure by Letters Patent, is—

The compound tool, consisting of pliers and shears, constructed and arranged substantially as herein described, as an improved article of manufacture.

W. X. STEVENS.

Witnesses:

GEO. S. WATERMAN,

PETER QUACKENBUSH.