

No. 751,594.

PATENTED FEB. 9, 1904.

W. L. WILLIAMS.
PLIER TYPE TOOL.

APPLICATION FILED AUG. 26, 1903.

NO MODEL.

FIG. 1

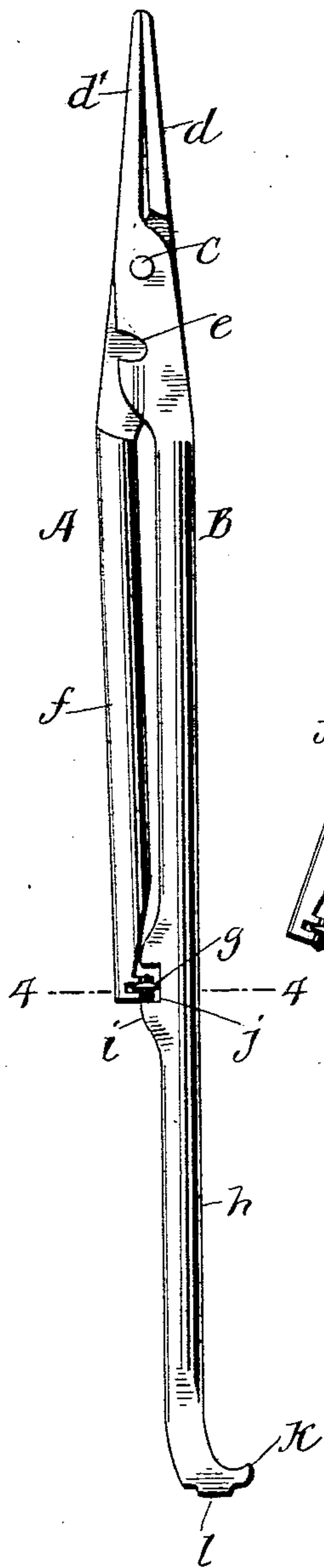


FIG. 2

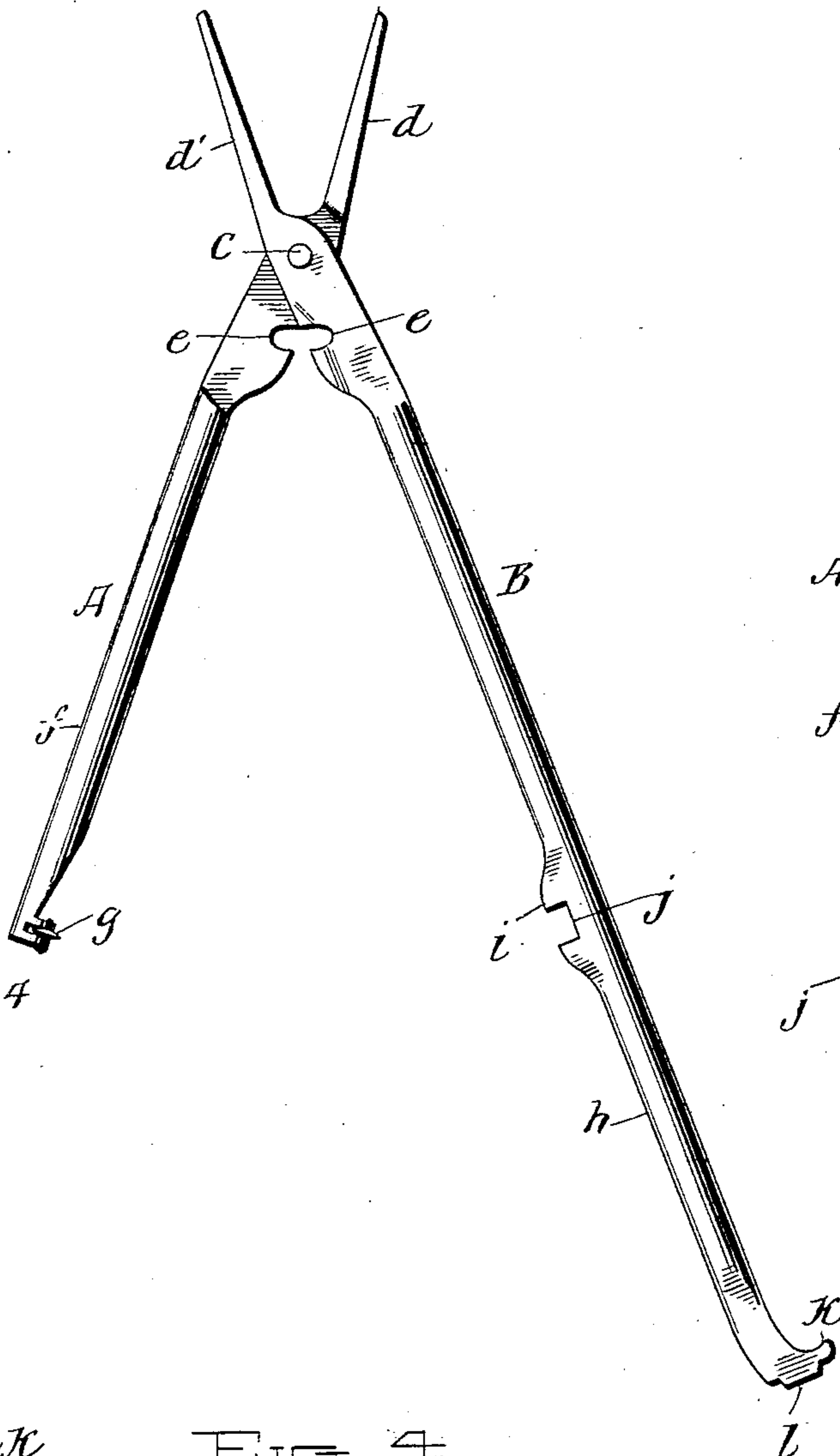


FIG. 3

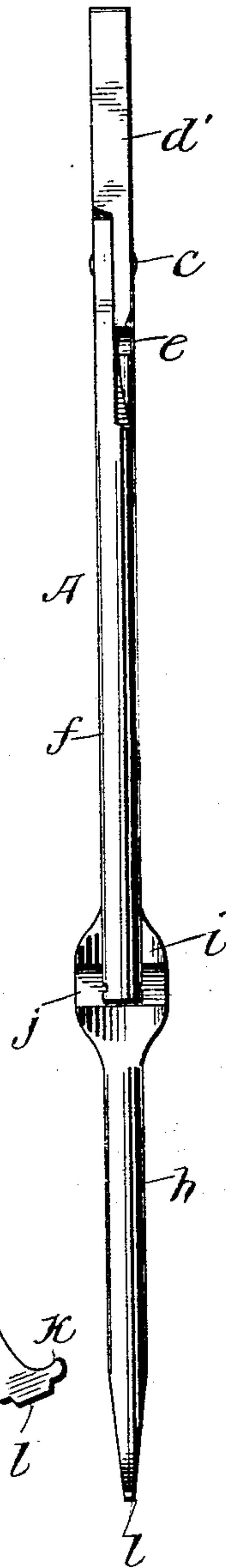
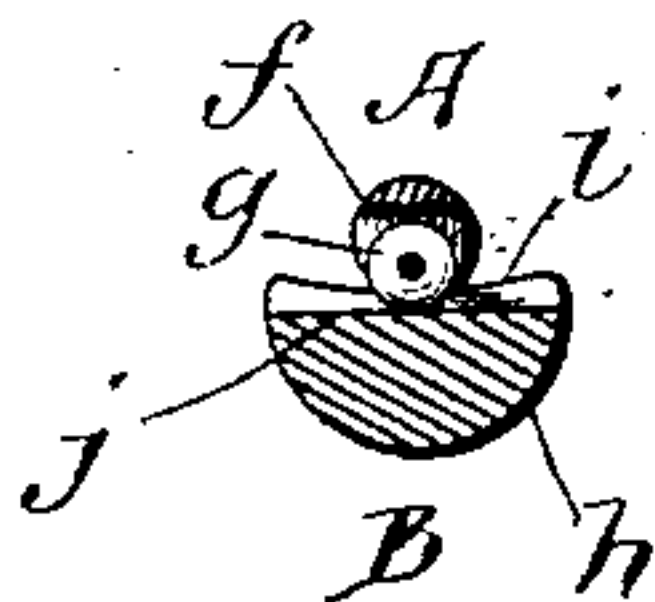


FIG. 4



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM L. WILLIAMS, OF WINONA, MINNESOTA.

PLIER-TYPE TOOL.

SPECIFICATION forming part of Letters Patent No. 751,594, dated February 9, 1904.

Application filed August 26, 1903. Serial No. 170,831. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. WILLIAMS, a citizen of the United States, residing at Winona, in the county of Winona and State of Minnesota, have invented certain new and useful Improvements in Plier-Type Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tools of the plier type, and contemplates an improved appliance of this character combining simply and compactly a number of implements each of which may be separately manipulated in a thoroughly efficient manner without interference from the other implements, the device as a whole being designed for use by machinists and like artisans.

The nature of the invention, the manner of use, and the resultant advantages are fully and clearly set forth in the following detailed description in connection with which reference is to be had to the accompanying drawings, illustrating the combination-tool in its preferred form.

In the drawings, Figure 1 is an elevation of a tool embodying my invention. Fig. 2 is a similar view with the jaws and handles in expanded position. Fig. 3 is a side view. Fig. 4 is a sectional view on line 4 4 of Fig. 1.

Referring to the drawings by letter, A B denote the two members of the tool, which are pivoted together at *c* to form a pliers, the jaws being lettered *d d'*. A wire-cutter is provided by notching the members below the pivot *c*, as shown at *e e*. At the end of the handle *f* for the jaw *d* is a transversely-disposed cutter-wheel *g*, and the handle *h* for the jaw *d'*

is provided intermediately with a seat *i* for a glass tube, the cutter-wheel and seat forming a glass-tube cutter. The seat *i* is of concave form, as shown in Fig. 4, and *j* is a recess centrally of said seat to receive the cutter-wheel and permit complete closing of the jaws *d d'*. At the end of the handle *h* is a hook *k* for the removal of fibrous packing from journal and axle boxes, and at the outer side of said hook is a screw-driven blade *l*.

The simple appliance therefore combines five very useful tools, and it will be noted that each may be used entirely independently of the others. The pliers and wire-cutter are manipulated without liability of the hand contacting with the parts of the tube-cutter or the packing-hook or screw-driven blade. The handles are brought together while the hook is in use and may be so positioned or may be expanded when the screw-driven blade is employed.

In the use of the glass-tube cutter it will be understood that the tube is held against the seat and that the cutter-wheel acts on the inner wall of the tube.

I claim as my invention—

A tool of the plier type having a long handle provided intermediately with a recessed seat for glass tubes, and having a short handle provided at its end with a cutter-wheel said wheel entering the recess in the closed condition of the plier-jaws.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM L. WILLIAMS.

Witnesses:

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