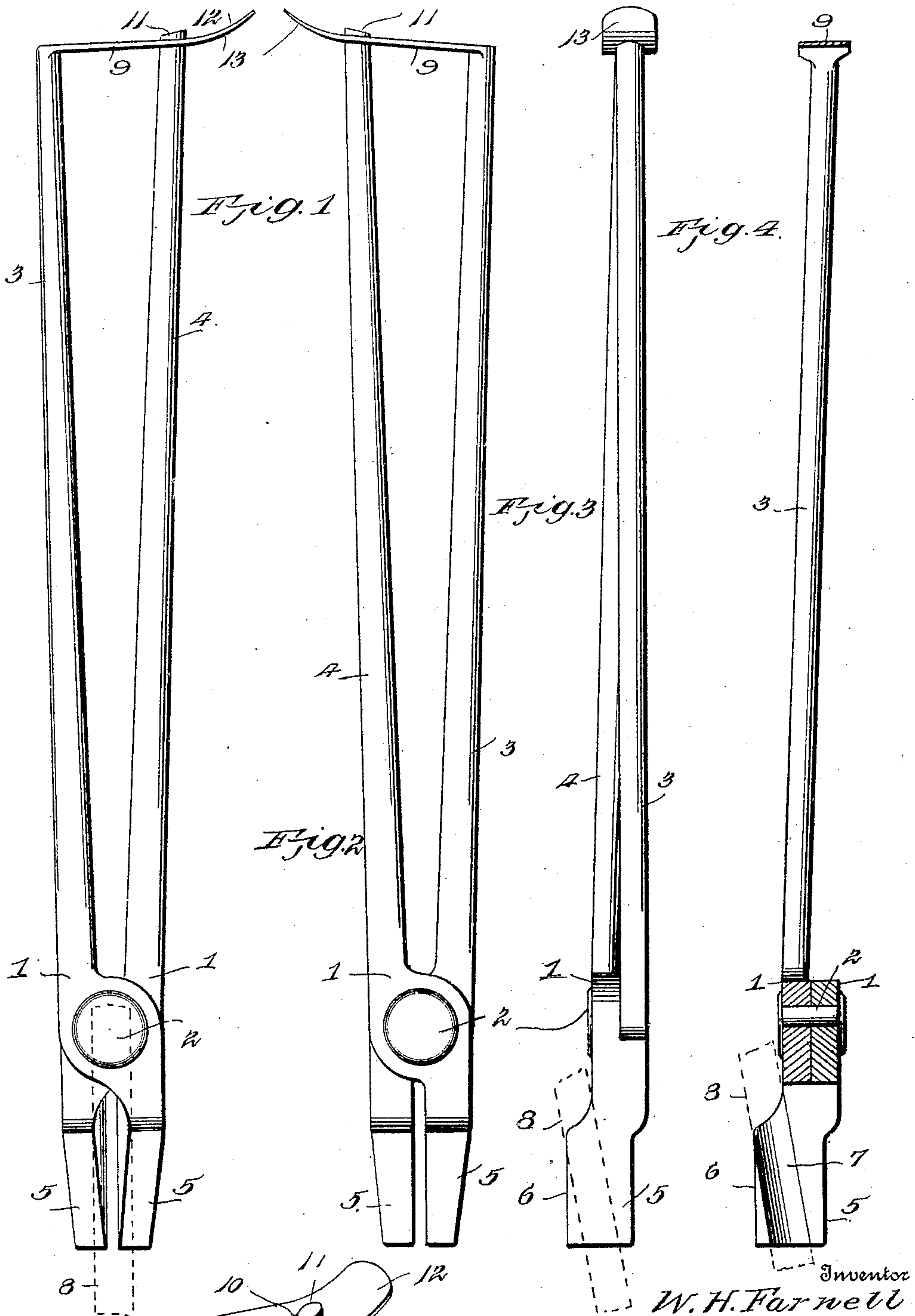


No. 835,351.

PATENTED NOV. 6, 1906.

W. H. FARNELL.
TONGS.

APPLICATION FILED DEC. 26, 1905.



Witnesses
Frank. Hough

A. S. Elmore

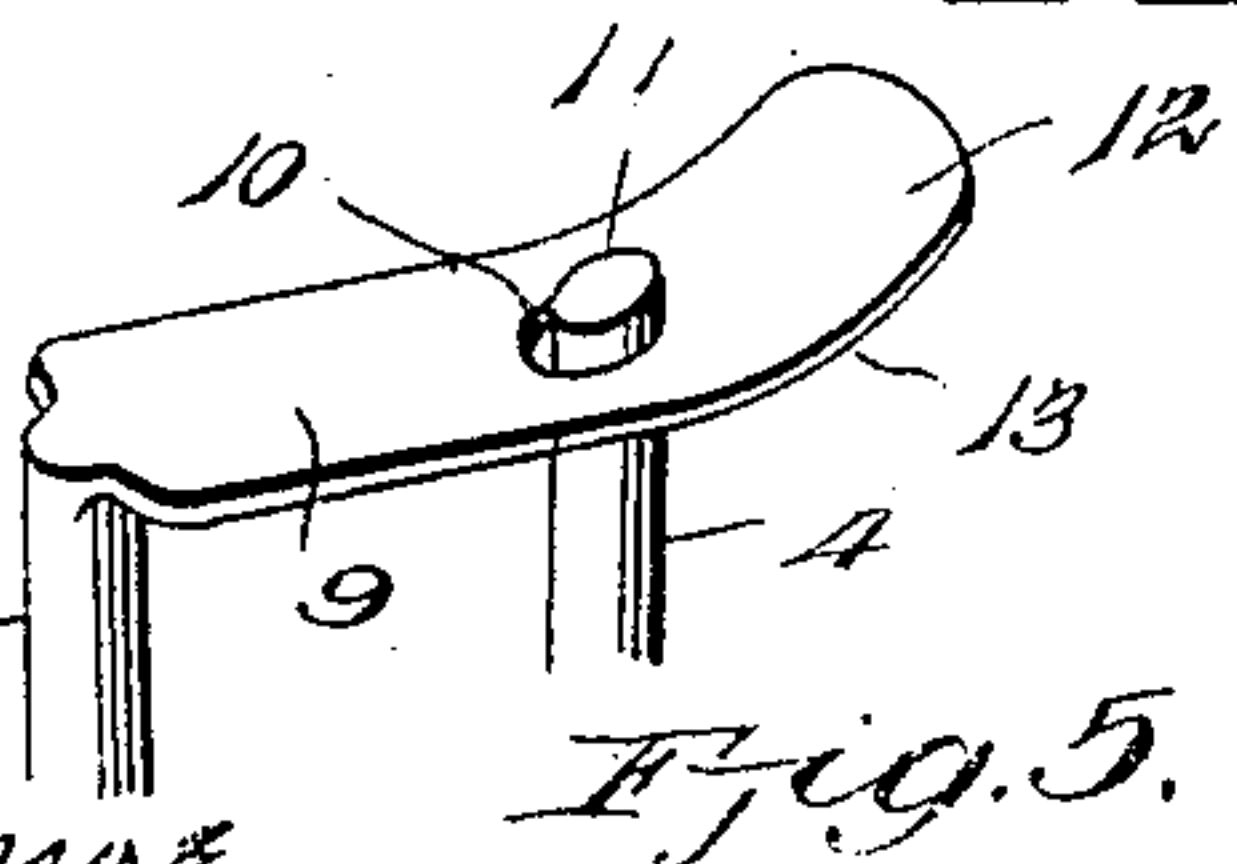


Fig. 5.

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UNITED STATES PATENT OFFICE.

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TONGS.

No. 835,351.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. FARNELL, a citizen of the United States, residing at Wallingford, in the county of Rutland and State of Vermont, have invented new and useful Improvements in Tongs, of which the following is a specification.

This invention relates to tongs designed especially for holding hoes or similar tools during the grinding operation, and has for its objects to produce a comparatively simple inexpensive device of this character in which the work will be securely clamped, one the parts of which may be readily locked in clamping position or unlocked to release the work, and one wherein the work may be conveniently adjusted during the grinding operation.

With these and other objects in view the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a pair of tongs embodying the invention. Fig. 2 is a similar view as seen from the other side. Fig. 3 is an edge view of the tongs, showing by dotted lines a piece of work clamped between the jaws. Fig. 4 is a longitudinal section taken on a line centrally between the members of the tool. Fig. 5 is a detail perspective view of the upper ends of the handles.

Referring to the drawings, it will be seen that the tool comprises, as usual, a pair of crossed members 1, pivotally connected adjacent their forward ends by a transverse pivoted member or rivet 2 and presenting a pair of handles or shanks 3 and 4, terminating at their forward ends in advance of the pivot 2 in a pair of cooperating gripping-jaws 5, having transversely-offset portions 6 and provided on their inner faces with diagonally-inclined grooves or channels 7, constituting seats for the reception of the shank 8 of the tool to be ground, it being noted that the upper ends of the seats 7 terminate in the upper ends of the offset portions 6 of the jaws.

The handle 3 is provided at its upper end with a locking member or spring 9, formed integral with and extending at right angles to the handle, said spring being provided between its ends with an opening 10, designed

to receive and forming a seat or keeper for the upper end of handle 4, which is slightly beveled or inclined, as at 11, the free end of the spring 9 being curved upwardly, as shown at 12, to present a lower cam-face 13 for a purpose which will presently appear.

In practice the shank 8 of the tool to be ground is seated in the grooves 7 between the gripping-jaws 6, and the handles 3 and 4 grasped and move toward each other for tightly gripping the work, whereupon the cam-face 13 of the spring locking member will ride over the beveled end 11 of the handle 4 to cause the member to automatically lock the parts of the tool in clamping position, with the end of handle 4 seated in the opening 10. When it is desired to readjust the piece of work during the grinding operation, the handles may be conveniently released by grasping and presenting them together with one hand and with the other hand raising the free end of the locking member 9, it being understood that after the work has been properly adjusted the parts of the tool are again locked by pressing them together, as before explained, whereupon the member 9 will spring automatically into engagement with the handle 4. It is to be particularly noted that owing to the grooves 7 being inclined the tongs may be conveniently brought into engagement with the shank 8 of the work and, furthermore, that by forming the spring locking member 9 as an integral part of one of the handles liability of the member being weakened and becoming defective in use is minimized, if not wholly obviated.

From the foregoing it is apparent that I provide a simple device admirably adapted for the attainment of the ends in view, it being understood that minor changes in the details herein set forth may be resorted to without departing from the spirit of the invention.

Having thus described my invention, what I claim is—

A tool of the type described comprising a pair of crossed pivoted members provided at their forward ends with gripping-jaws and having their rear ends adapted for movement toward and from each other, and a spring locking-arm fixed on the rear end of one of the members to project at substan-

tially right angles therefrom and to normally lie in the path of movement and having an opening to receive the rear end of the other member, said locking-arm having its
5 free end curved outwardly and rearwardly to provide a cam-face beneath which the rear end of the said tool member rides for moving the locking-arm automatically out of its path

and for effecting an automatic engagement of the locking-arm with the member. 10

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

WILLIAM H. FARNELL.

Witnesses:

IRVING C. HARE,
THOMAS BUTLER.