

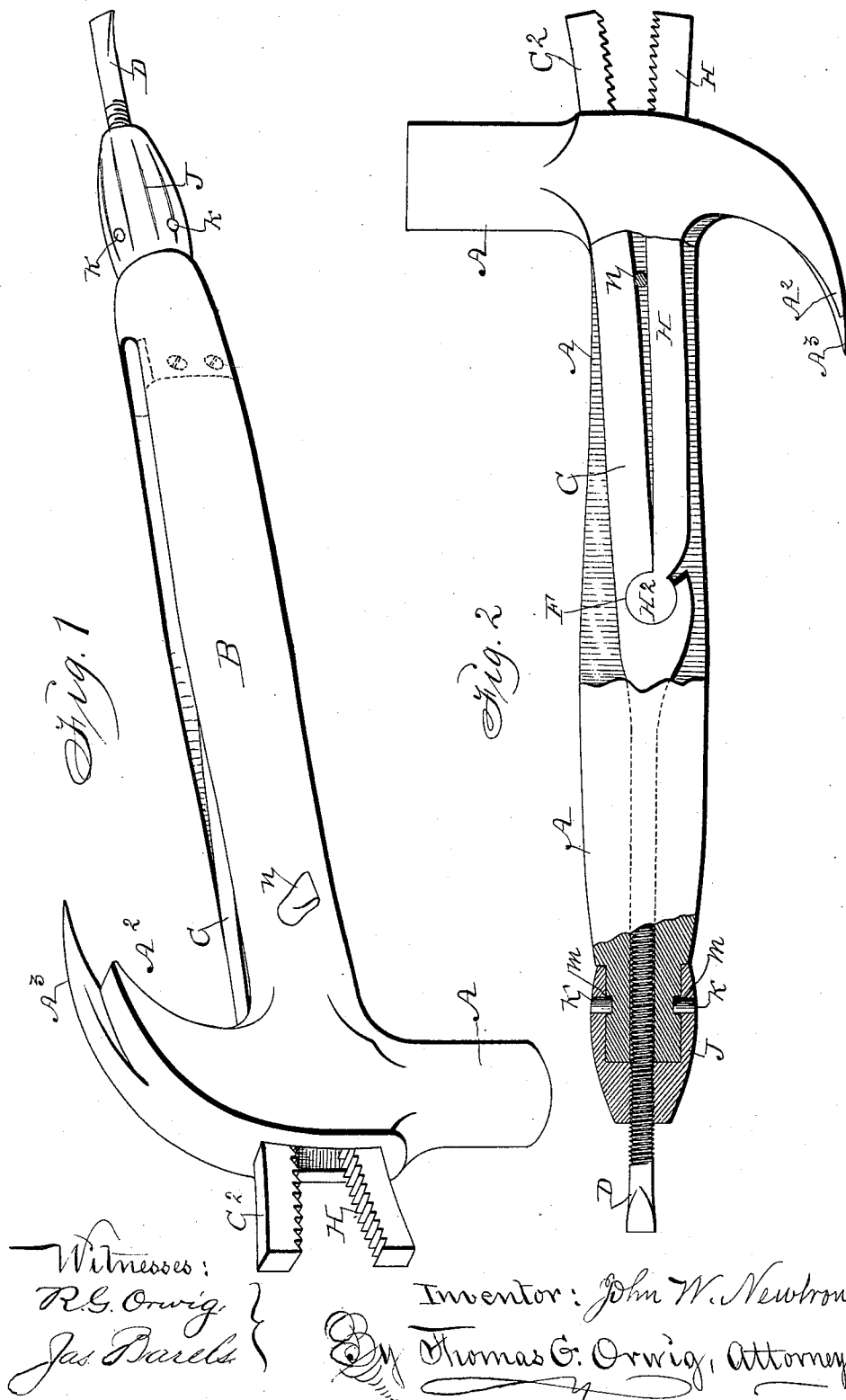
No. 611,973.

Patented Oct. 4, 1898.

J. W. NEWBROUGH.  
COMBINATION TOOL.

(Application filed Feb. 10, 1898.)

(No Model.)



Witnesses:  
R. S. Orwig }  
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# UNITED STATES PATENT OFFICE.

JOHN W. NEWBROUGH, OF DAKOTAH, IOWA, ASSIGNOR OF ONE-HALF TO  
W. W. STERNS, OF HUMBOLDT, IOWA.

## COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 611,973, dated October 4, 1898.

Application filed February 19, 1898. Serial No. 670,909. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. NEWBROUGH, a citizen of the United States, residing at Dakotah, in the county of Humboldt and State of Iowa, have invented a new and useful Combination-Tool, of which the following is a specification.

My object is to provide a tool adapted for all the common purposes of a claw-hammer and also adapted for use as a tongs, a vise, and a screw-driver; and my invention consists in the construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the complete combination-tool, and Fig. 2 a side face view showing parts broken away to disclose the forms and combinations of operative elements.

The letter A designates the poll of the hammer.

A<sup>2</sup> is one of the integral claws that terminates in a flat and sharp end adapted to be forced under the head of a nail, spike, or other object that is to be moved.

A<sup>3</sup> is a mating claw that is extended beyond the end of the claw A<sup>2</sup> and is pointed as required to force it into wood or under objects for which the claw A<sup>2</sup> is not adapted.

B is a handle formed integral with the poll A and claws A<sup>2</sup> and A<sup>3</sup> by casting in a mold or in any suitable way. A central slot extends from near the free end of the handle to the other end and through the poll and base of the jaws. The free end of the handle may be a separate piece fixed to the bifurcated ends, as indicated by dotted lines in Fig. 1.

C is the main portion of an adjustable tongs adapted for the common uses of tongs and also adapted to bite fast and hold an object in the manner of a vise. Its one end portion terminates in a jaw C<sup>2</sup>, that has a serrated inner face, and at its other end portion is a screw C<sup>3</sup>, that terminates in a screw-driver D. At its center and in its inner face it has a socket F, adapted to admit the end of a mating jaw and to produce a hinged connection between the two mating jaws.

H is a jaw corresponding in form with the jaw C and provided with a knuckle H<sup>2</sup> at its

inner end that fits into the socket F of the mating jaw to detachably and adjustably connect the two jaws.

A bore extending through the free end of the handle from the slot in the handle allows the screw C<sup>3</sup> and screw-driver D to be passed therethrough as required to combine and operate the jaws with the handle B.

J is a nut in the form of a ferrule fitted on the free end of the handle and rotatably connected therewith by means of fixed pins *k*, that extend into an annular groove *m* in the handle, as clearly shown in Fig. 2, and in such a manner that when the nut is operated it will impart longitudinal motion to the screw C<sup>3</sup> as required to adjust the mating jaws relative to an object that is to be engaged by the jaws.

A pin *n*, fitted in coinciding holes in the parallel parts of the slotted handle and passed between the mating jaws, serves as a means of spreading the jaws apart when they are moved outward relative to the hammer.

Having thus described my invention, its operation and utility, what I claim, and desire to secure by Letters Patent, is—

1. In a combination-tool, a hammer having an integral handle and a slot extending through the hammer and to the central portion of the handle, a bore extending from said slot through the free end of the handle, a tongs consisting of one member having a curved jaw at one end, a socket at its central portion and a screw at its other end, a mating member having a curved jaw at one end and a knuckle at its other end, a nut rotatably connected with the end of the handle and said screw and a pin fixed in the handle to extend between the mating members of the tongs, all arranged and combined as shown and described to operate in the manner set forth for the purposes stated.

2. A combination-tool comprising a handle having a hammer on one end of the handle and a nut rotatably connected with the other end, a slot in the hammer and a coinciding slot extended therefrom to the central portion of the handle and a bore extended from the slot in the handle to the nut on the end of the handle, a tongs consisting of one member having a jaw at one end and a screw at

the other end extended through the bore in the handle and the nut on the end of the handle and terminating in a screw-driver and a socket at its central portion, a mating member having a knuckle at one end fitted in said socket and a jaw at its other end and both jaws extended through the slotted handle and hammer and a pin fixed in the handle

between the mating members of the tongs, all arranged and combined as and for the purposes stated. 10

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