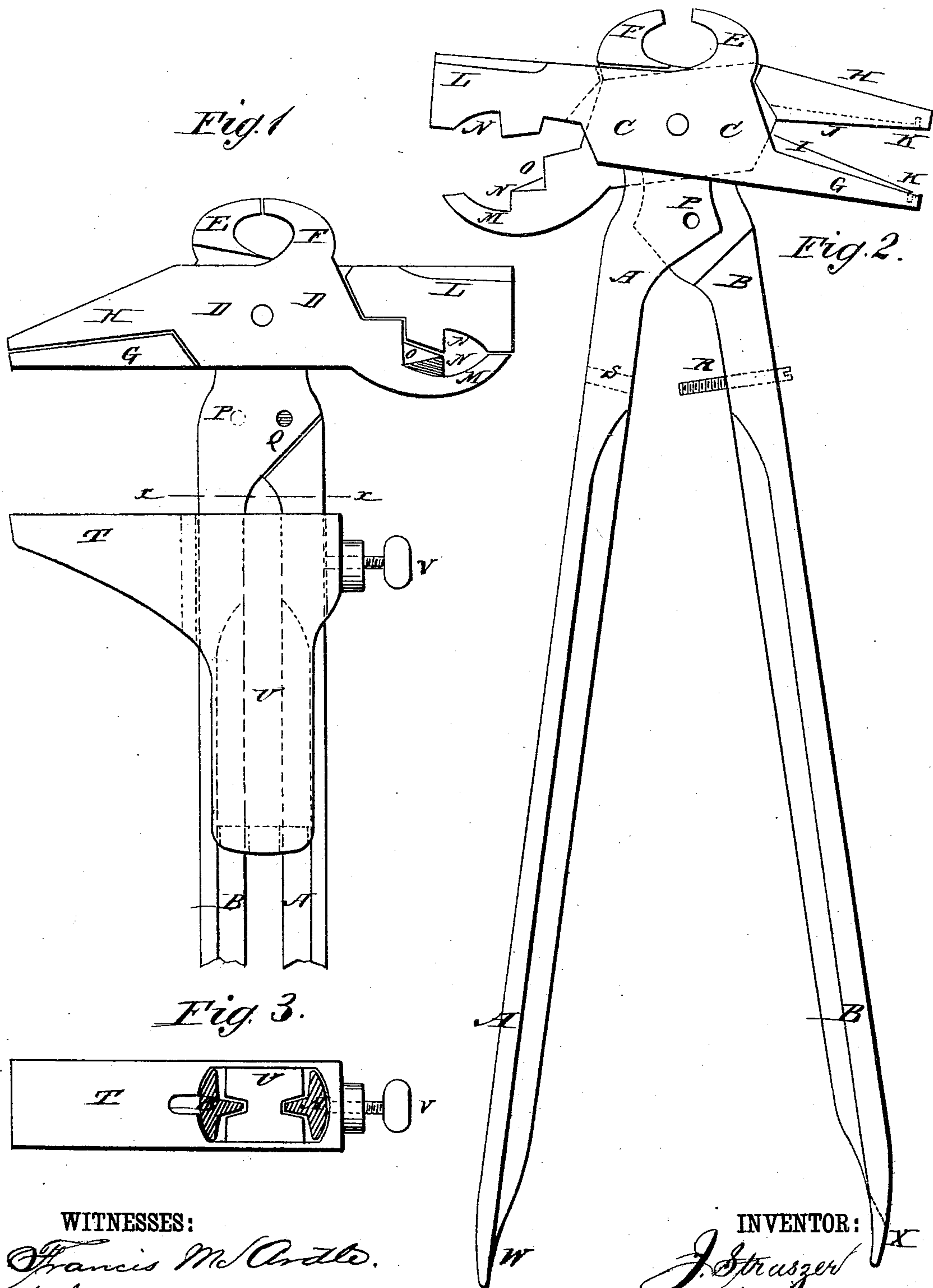


(Model.)

J. STRASZER.  
Combination Tool.

No. 243,652.

Patented June 28, 1881.



WITNESSES:

Francis McArthur.  
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# UNITED STATES PATENT OFFICE.

JOHN STRASZER, OF MANCHESTER, MISSOURI.

## COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 243,652, dated June 28, 1881.

Application filed May 2, 1881. (Model.)

*To all whom it may concern:*

Be it known that I, JOHN STRASZER, of Manchester, in the county of St. Louis and State of Missouri, have invented a new and Improved Combination-Tool, of which the following is a specification.

Figure 1 is a side elevation of my improvement arranged as a wrench. Fig. 2 is a side elevation of the same, the movable jaw being removed. Fig. 3 is a cross-section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to promote convenience by so constructing a tool that it can be used for various purposes.

In the accompanying drawings, A B are the handles, upon the forward ends of which are formed heads C D. The heads C D are halved and pivoted to each other, and have nipper-jaws E F formed upon their outer sides, as shown in Figs. 1 and 2.

Upon one end of the heads C D are formed jaws G H, similar to the jaws of pliers, except that upon the inner side of one of the said jaws is formed a rib, I, and in the other jaw a corresponding groove, J, so that the jaws G H can be used for crimping the end of a length of stove-pipe or other pipe, to cause the said end to enter the end of an adjacent length of pipe.

In the adjacent sides of the outer ends of the jaws G H are formed cross-notches K, to receive the side edges of the head of a tack or other small nail, for convenience in starting the said nail into its place.

Upon the other end of the head C is formed a hammer, L, and upon the corresponding end of the head D is formed a jaw, M, which shuts up against the hammer L. The adjacent sides of the hammer L and the jaw M are recessed to form shoulders N for the head of a nail to rest against, while the body of the said nail is held between the said jaw and hammer, so that the said nail can be started in places where it would be impossible to hold a nail with one hand while using a hammer with the other hand.

Upon the jaw M, between the shoulder N and a second shoulder formed upon the said jaw, is formed an incline or short angular rib, O, be-

tween which and the inclined inner surface of the corresponding part of the hammer L the teeth of a saw can be set; or the incline O can be replaced by a set-screw passing in through the jaw M.

In the halved parts of the handles A B, near the heads C D, are formed holes P Q, which are opposite each other only while the handles are spread apart, so that a wire passed through the holes P Q will be cut off when the said handles are closed.

In a screw-hole in one of the handles, as B, is placed a screw-pin, R, which enters a hole, S, in the other handle, or in a die attached to the said handle, so as to form a punch.

T is a movable jaw, the shank U of which has an aperture formed through it, of such a shape and size as to receive and fit upon the handles A B.

In the rear edge of the shank U of the jaw T is formed a screw-hole to receive the hand-screw V, so that the movable jaw T can be readily adjusted as the size of the nut or bolt to be operated upon may require.

The end of the handle A is flattened and tapered to form a screw-driver, W, and the end of the handle B is flattened, bent inward slightly, and notched to form a claw, X, for drawing tacks.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The handles A B, having heads C D on their forward ends, said heads being halved, pivoted together, and provided with nipper-jaws E F and plier-jaws G H, with rib and groove I J, as shown and described.

2. The heads C D, pivoted together and provided with jaws L M, having notches N and incline O, as and for the purpose specified.

3. The combination, with the pivoted handles A B, carrying working jaws, of the jaw T, opposed to one of the working jaws, and provided with a perforated shank and set-screw, as and for the purpose specified.

JOHN STRASZER.

Witnesses:

JACOB S. GATES,  
GEORGE STRASZER.