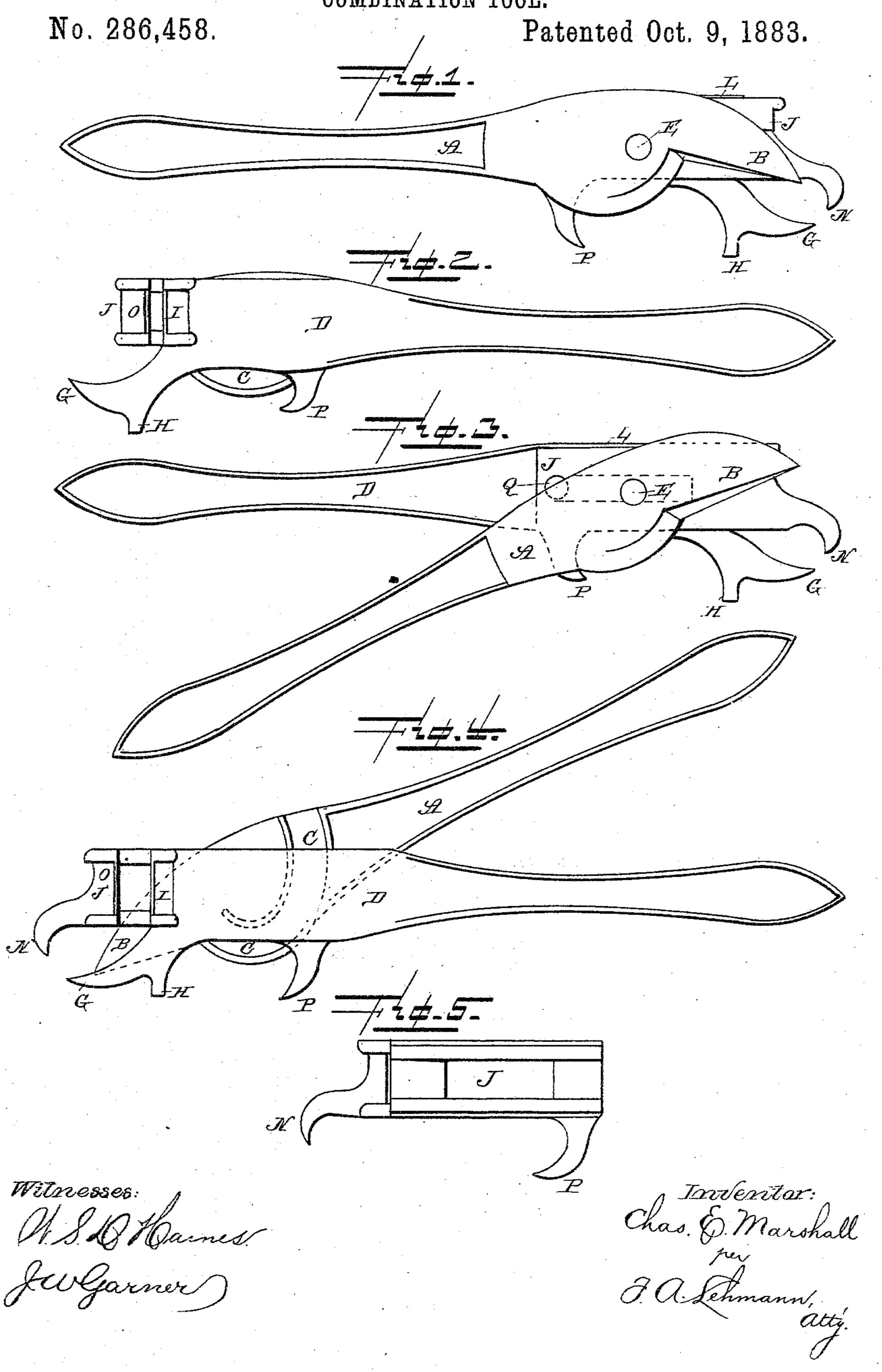
C. E. MARSHALL. COMBINATION TOOL.



United States Patent Office.

CHARLES E. MARSHALL, OF LOCKPORT, NEW YORK.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 286,458, dated October 9, 1883.

Application filed August 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. MARSHALL, of Lockport, in the county of Niagara and State of New York, have invented certain new and useful Improvements in Combined 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in combined tools; and it consists in the combination of a lever which has its shorter end formed into a knife or cutter, and which is provided with an eccentric groove upon its inner side, a slide provided with a jaw, and with a hook at each of its ends, and a stud or projection by which the slide is moved, and a second jaw or lever which is provided with suitable prongs or projections, and a jaw, all of which will be more fully described herein after.

The object of my invention is to provide a tool for household use in which are combined jaws for a vise, nut-cracker, wrench or plier, a tack-puller, a pruner, a wire-cutter, canopener, and other such devices as are needed around the house and in the kitchen.

invention taken from opposite sides, showing the tool when closed. Figs. 3 and 4 are side elevations taken from opposite sides, showing the tool open. Fig. 5 is a detached view of the slide.

A represents one of the handles or levers, which has its front or shorter end formed into a double-edged cutter, B. Upon the inner side of this lever is formed the curved groove C, in 40 which the stud or projection upon the slide catches. The second lever, D, has the pivotal pin E formed as a part of it, and upon which the lever A is pivoted. The front end of the lever D is formed into the sharp prong G and | 45 the vertical projection H, and upon the front end is also formed the jaw I. These two levers A D do not come in contact with each other, except where the cutter B is made to co-operate with the projection H, but are sepa-50 rated from each other by means of the slotted slide J. This slide has the pivotal pin to pass I

through its slot, and is so shaped as to catch between the flanges L, which are formed upon the lever D, so as to always move in a straight line. This slide has a hook, N, formed upon 55 its front end, and at right angles to this hook the jaw O. At the opposite end of the slide is formed a second hook, P. Upon the same end of the slide as the hook P is the stud or projection Q, which catches in the curved 60 groove in the inner side of the lever A. When the two levers are opened and closed the movement of the lever A causes the curved groove to act upon the stud or projection Q in such a manner as to force the slide endwise for the 65 purpose of opening and closing the jaws I O, which form a vise, nut-cracker, wrench, and a tool for lifting objects of different kinds. These jaws are especially useful in the kitchen, where hot articles are to be tilted or moved 70 around. When the jaws are opened, the top edge of the cutter B is made to act in conjunction with the hook formed upon the inner end of the slide, for the purpose of acting as a pruner and wire-cutter and other such devices. 75 The lower edge of this part B also acts in conjunction with the projection H on the top of the lever D, for the purpose of moving articles of different kinds. The projection H upon the lever D serves as a tack-puller where the 80 tack is to be pried up. Where the tack is driven into the floor so that it is difficult to pry it up, and it is desired to pull it out, the hook N will be made to catch under or opposite the head, and then the handles will be closed as 85 much as possible, when the projection Q will move down past the head upon the opposite side, when the tack will be held rigidly between them, and then can be pulled directly upward. When a can-opener is needed, the 90 sharp point B will be forced down through the top of the can, and then used in connection with the hook N on the front end of the slide.

When it is desired that the slide should remain stationary and not be moved by the lever 95 A, it is only necessary to turn the levers A D at right angles to each other, so that the stud or projection Q leaves the slot in the side of the lever A, when the slide can be pushed endwise, where it will not be affected by any 100 movement of the lever A.

The projection H, in addition to operating

in connection with the cutter B, also serves as the fulcrum for the projection Q in pulling up tacks.

Having thus described my invention, I claim—

1. In a combined tool, the combination of the handle A, provided with the cutter B and the operating-groove, with the slide provided with the hook P at its inner end and the jaw 10 O, with the lever D, provided with the pivotal pin, and a jaw to co-operate with the jaw on the slide, substantially as shown.

2. The combination of the handle A, pro-

vided with the cutter B and the groove, with the slotted slide provided with the stud or projection, the hooks N P, and the jaw, with the lever D, provided with the jaw and the projection G, the parts being combined and arranged to operate substantially as set forth.

In testimony whereof I affix my signature in 20

presence of two witnesses.

CHARLES E. MARSHALL.

Witnesses:

G. T. McComb,

H. P. REED.