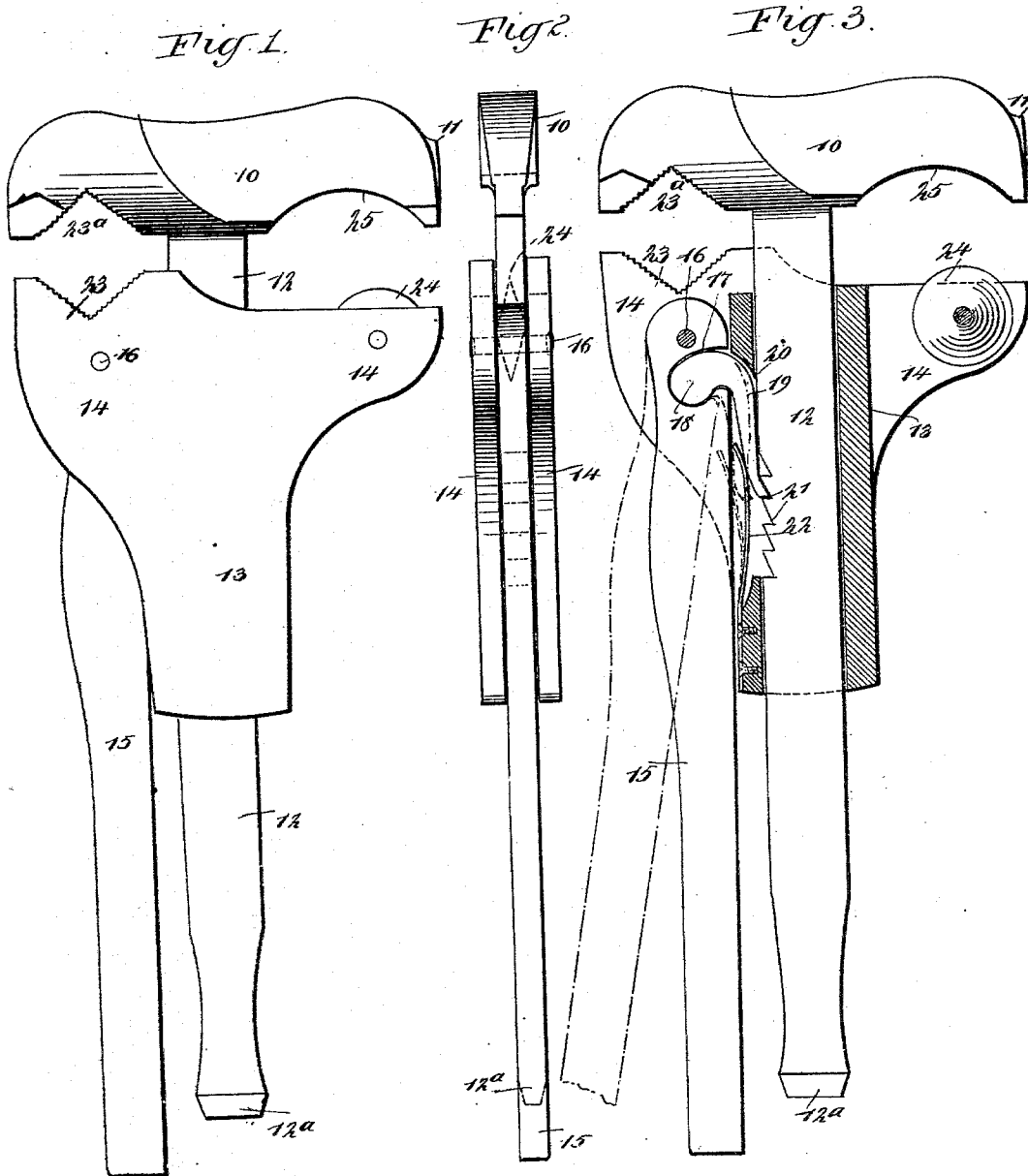


(No Model.)

C. BECKER.
COMBINATION TOOL.

No. 511,107.

Patented Dec. 19, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES BECKER, OF LITTLE BERGER, MISSOURI.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 511,107, dated December 19, 1893.

Application filed April 12, 1893. Serial No. 470,008. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BECKER, of Little Berger, in the county of Gasconade and State of Missouri, have invented a new and

Improved Combination-Tool, of which the following is a full, clear, and exact description.

My invention relates to improvements in combination tools; and the object of my invention is to produce a device which is especially adapted for use as a pipe wrench and cutter, which enables a pipe to be firmly gripped and turned without injuring the pipe, which is adapted also to cut a pipe, which may be quickly adjusted to a pipe, and which, by separating the head from the remaining portion of the device, forms a convenient hammer and screw driver.

To this end my invention consists of certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the tool embodying my invention. Fig. 2 is a view of the same, looking on one edge; and Fig. 3 is a longitudinal section of the tool.

The tool is provided with a head 10 which is elongated, as shown in Fig. 1, and which is squared at one end as shown at 11, and can, with ease, be removed from sleeve 13, so that when necessary it may be used as a hammer head. To the center of the head and projecting at right angles to it is fitted a shank 12 which serves as a handle when the device is used as a hammer, and this shank is thinned at one end, as shown at 12^a, to enable it to easily enter the slot of a screw so that the device may be used as a screw driver. The shank 12 extends through a sleeve 13 which has on opposite sides parallel projecting flanges 14, which serve as jaws and which also serve to carry the cutter, as hereinafter described. Between two of these flanges and on one side of the sleeve is pivoted a lever 15, this lever being pivoted at one end, as shown at 16, so that it lies normally parallel with the shank 12, and near its pivoted end it is recessed, as shown

at 17, the recess being of a generally circular shape, and in this recess is held the enlarged head 18 of a pawl 19, which pawl projects inward through a slot 20 in the sleeve 13 and is adapted to engage teeth 21 in the shank 12, the pawl being pressed into engagement with said teeth by a spring 22 which is secured to the sleeve and which presses upon the pawl. The flanges 14, at a point near the pivoted end of the lever 15, are notched, as shown at 23, these notches forming the flanges into jaws which are arranged to fit upon one side of the pipe, and a similar notch 23^a is formed in the head 10 at a point opposite the notches 23, this notch 23^a being adapted to fit upon the opposite side of a pipe, and by forcing the sleeve 13 and head 10 toward each other, the opposite jaws are clamped firmly upon the pipe so that the pipe may be turned with the tool. The jaws are roughened on their inner sides, as shown in Figs. 1 and 3, so that they may secure a good grip on the pipe. Between the opposite flanges 14 of the sleeve and on the opposite side of the shank 12, is pivoted a rotary cutter 24, and this projects above the flanges and opposite a groove 25 in the head 10, and by fastening the tool to a pipe, with the cutter in position against the pipe, the tool may be turned and the cutter forced into and through the pipe. By throwing the lever 15 outward into the position shown in dotted lines in Fig. 3, the pawl 19 may be disengaged from the teeth 21 of the shank, so that the tool may be placed conveniently upon a pipe, or the head 10 and the shank 12 removed from the sleeve 13. When the tool is in position upon the pipe, it may be tightened by swinging the lever 15 out and in, and this causes the pawl to advance tooth by tooth on the shank and the inward motion of the lever causes the pawl to push forward the sleeve 13, so that it is forced firmly against the pipe.

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

1. A tool of the kind described, comprising a head having a notch in one side, a shank projecting at right angles to the head and provided with teeth in one side, a sleeve held to slide on the shaft, outwardly projecting flanges

on the sleeve, the flanges being notched opposite the notch in the head, a lever fulcrumed between the flanges, and a separate pawl carried by the lever and adapted to engage the 5 teeth in the shank, substantially as described.

2. A tool of the kind described, comprising a head having a notch in one side and a groove in the other, a shank projecting from the head between the notch and groove, a detachable 10 sleeve held to slide on the shank, the sleeve having parallel flanges projecting from opposite sides and the flanges being provided on one side with notches to register with the notch in the head, a cutter pivoted in the flanges, 15 opposite the groove in the head, and a lever

and ratchet mechanism for sliding the sleeve on the shank, substantially as described.

3. The combination, with the grooved head and the shank projecting at right angles from the head, the shank having teeth in one side, 20 of a sleeve held to slide on the head, a revolvable cutter carried by the sleeve and held opposite the groove in the head, a swinging lever carried by the sleeve, and a separate pawl carried by the lever and adapted to engage the 25 teeth in the shank, substantially as described.

CHARLES BECKER.

Witnesses:

CHRISTIAN EBERLIN,

THEODORE KOHLBUSCH.