

(No Model.)

J. N. PARKER.
COMBINATION TOOL.

No. 495,055.

Patented Apr. 11, 1893.

FIG. 1.

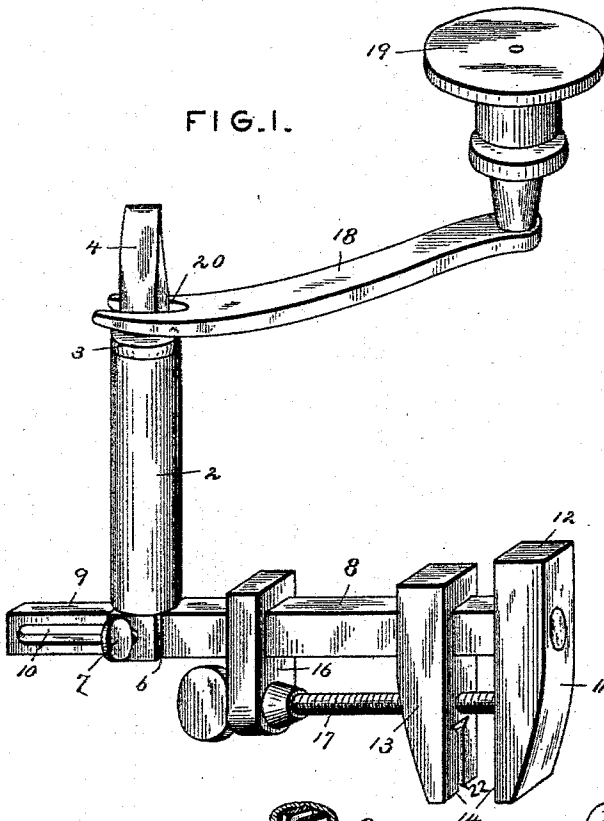


FIG. 2.

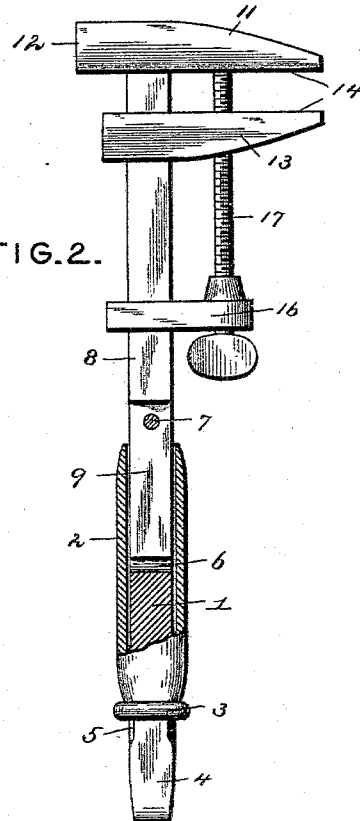


FIG. 3.

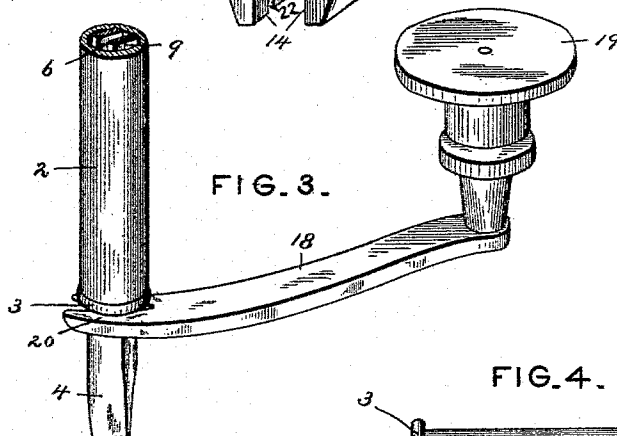
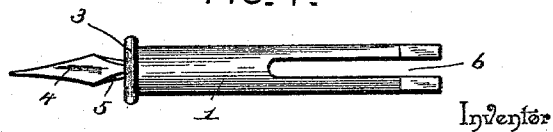


FIG. 4.



Witnesses

Henry L. Lymer,
J. N. Siggart,

By his Attorneys,

J. N. Parker.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN N. PARKER, OF COLDWATER, MICHIGAN.

COMBINATION-TOOL.

SPECIFICATION forming part of Letters Patent No. 495,055, dated April 11, 1893.

Application filed January 25, 1893. Serial No. 459,707. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. PARKER, a citizen of the United States, residing at Coldwater, in the county of Branch and State of Michigan, have invented a new and useful Combination-Tool, of which the following is a specification.

My invention relates to a new and improved combination tool; the objects in view being to produce a tool adapted to serve the useful functions of a wrench, hammer, screw-driver, a brace for operating upon a hand screw-driver, or holding-bits, and also as a tack-drawer or nail-puller.

With these and other objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings—Figure 1 is a perspective view of a combination tool embodying my invention, the same being adapted to serve as a brace. Fig. 2 is an elevation of the tool, the same being in position to serve as a wrench, a portion of the handle being broken away to illustrate the connection between the wrench-stock and handle. Fig. 3 is a perspective view, the tool being adapted to serve as a screw-driver and to be operated by the brace. Fig. 4 is a detail of the screw-driver spindle.

Like numerals indicate like parts in all the figures of the drawings.

1 designates the shank, upon which is mounted a handle 2, adapted to afford a suitable and convenient grip for the hand of the operator. The shank 1, below the handle is provided with a fixed collar or boss 3, and beyond the same is extended to form a screw driving-blade 4. At its juncture with the collar 3, the blade is reduced at opposite sides and at one edge as indicated at 5, whereby it is substantially V-shaped in cross section. The upper half or portion of the shank 1, is provided with a longitudinal slot 6, or in other words, the said shank is bifurcated at its upper end, which extends above the handle 2, and a set screw 7, projects through the perforations formed in the bifurcations, one of which perforations is threaded, whereby as will be obvious, by a rotation of the screw the

bifurcations may be clamped upon an interposed object.

8 designates a wrench-stock, the same being preferably rectangular in cross-section, and having its lower end reduced at opposite sides, thus forming a tenon 9, adapted to fit loosely between, and to be clamped when desired by, the bifurcations 6, of the shank 1. The tenon 9, is provided with a longitudinal slot 10 through which the set-screw 7, passes. The outer end of the stock 8, is provided with a fixed head 11, whose rear face is extended beyond the stock and beyond the sliding head to form a hammer 12. A sliding head 13 is mounted on the stock 8, and it and the head 11 are extended to form respectively the movable and fixed jaws 14. A bracket 16 is mounted on the stock 8 near its lower end, and in this bracket is journaled the lower end of a threaded feed-rod 17, having at its lower end a thumb-piece, and its upper end threaded through a movable jaw and bearing against the under side of the fixed jaw, all as usual.

18 designates a curved brace-arm, having at one end a swiveled handle 19, and its opposite end shaped to constitute a tack or nail-puller 20, and adapted also to fit over and snugly receive the reduced V-shaped portion 5 of the screw driver-blade 4. This completes the construction of the device and I will now proceed to describe the manner of using the same.

As shown in Fig. 2, it will be seen that the device is adapted to serve as an ordinary wrench. In this instance it will also be observed that the stock 8, is now rigid with the handle and shank. Such is accomplished by a loosening of the screw 7, a withdrawal of the stock as far as the slot 10 will permit, a reinsertion of the lower end of the stock into the handle and bifurcations of the shank and a retightening of the screw 7. By wholly detaching the handle a convenient screw driver for operating upon small screws in soft wood is produced, the wrench portion being then dispensed with. If the screw be large, the wood be hard, or it is desired to exercise more than the ordinary strength upon the screw, the brace arm 18 is employed as shown in Fig.

3. In such instance, the claw 20 is fitted over the V-shaped portion of the shank of the driver, and said brace employed as a lever in a manner that will be obvious. It will also be seen that this brace arm may be employed separately as an ordinary tack drawer or nail-puller.

For the purpose of employing the device as a brace, the jaws 14 are provided upon their adjacent faces with V-shaped grooves 21, which grooves will also serve for holding the corners of nuts of axles when the wrench is employed as a carriage wrench during the oiling of bearings, and by clamping the jaws tight upon the nut, there will be no necessity of handling the nut and soiling the hands. In a like manner, as before stated, the grooves will receive and retain the ordinary bit-shank. In such instance, the parts are given the positions in which they are illustrated in Fig. 1 of the drawings, by which figure it will be seen that the set screw 7 has been loosened so that the stock 8 might be drawn out from the handle, swung at a right-angle thereto, and the screw tightened; the brace arm now has its claw 20 introduced over the V-shaped or reduced portion of the screw driver, and thus the brace is complete.

The operation of the brace being precisely the same as the brace ordinarily used, the same will require no specific description. Both jaws may have the inner ends of their grooves terminate in cavities 22 whereby a wire-nail clamped therein between and its head received, the said nail will be adapted to serve as an awl.

From the foregoing description in connection with the accompanying drawings it will be seen that I have provided a very convenient, simple device which contains, and is capable of serving, as a hammer, a wrench, a hand and brace-operated screw-driver, a nail and tack puller and a brace for operating boring-tools.

Having described my invention, what I claim is—

1. In a combination-tool, the combination with a wrench-stock, of a handle, devices for

securing the handle upon the end of the stock either in line with or at an angle thereto, and a brace-arm removably connected with the opposite end of the handle, substantially as specified.

2. In a combination-tool, the combination with a wrench-stock, a handle terminating at one end in a screw-driver and provided at opposite sides and at one edge with a reduced-portion, devices for securing the handle in line with, or at an angle to the stock, and the brace-arm having the swiveled head at one end and its opposite end shaped to form a claw removably engaging the said reduced-portion of the shank of the screw-driver, substantially as specified.

3. In a combination-tool, the combination with the wrench-stock, of the handle provided at one end with a screw driving-blade, devices for removably connecting the opposite end of the handle either in line with, or at an angle to, the end of the stock, and the curved brace-arm having a handle at one end and its opposite end bifurcated to engage with the screw driver-blade, substantially as specified.

4. In a combination-tool, the combination with the stock having a reduced lower end provided with a longitudinal slot, of a shank bifurcated at one end to receive said end of the stock and at its opposite end terminating in a screw driving-blade, provided with a shank V-shaped in cross-section, a hollow handle mounted on the shank and terminating short of the ends thereof, a binding-screw passed through the bifurcations of the shank and slot of the stock, and the curved brace-arm having the swiveled head at one end, and its opposite end provided with a claw for engaging the V-shaped portion of the blade, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN N. PARKER.

Witnesses:

N. BALDWIN,
CHAS. F. HOWE.