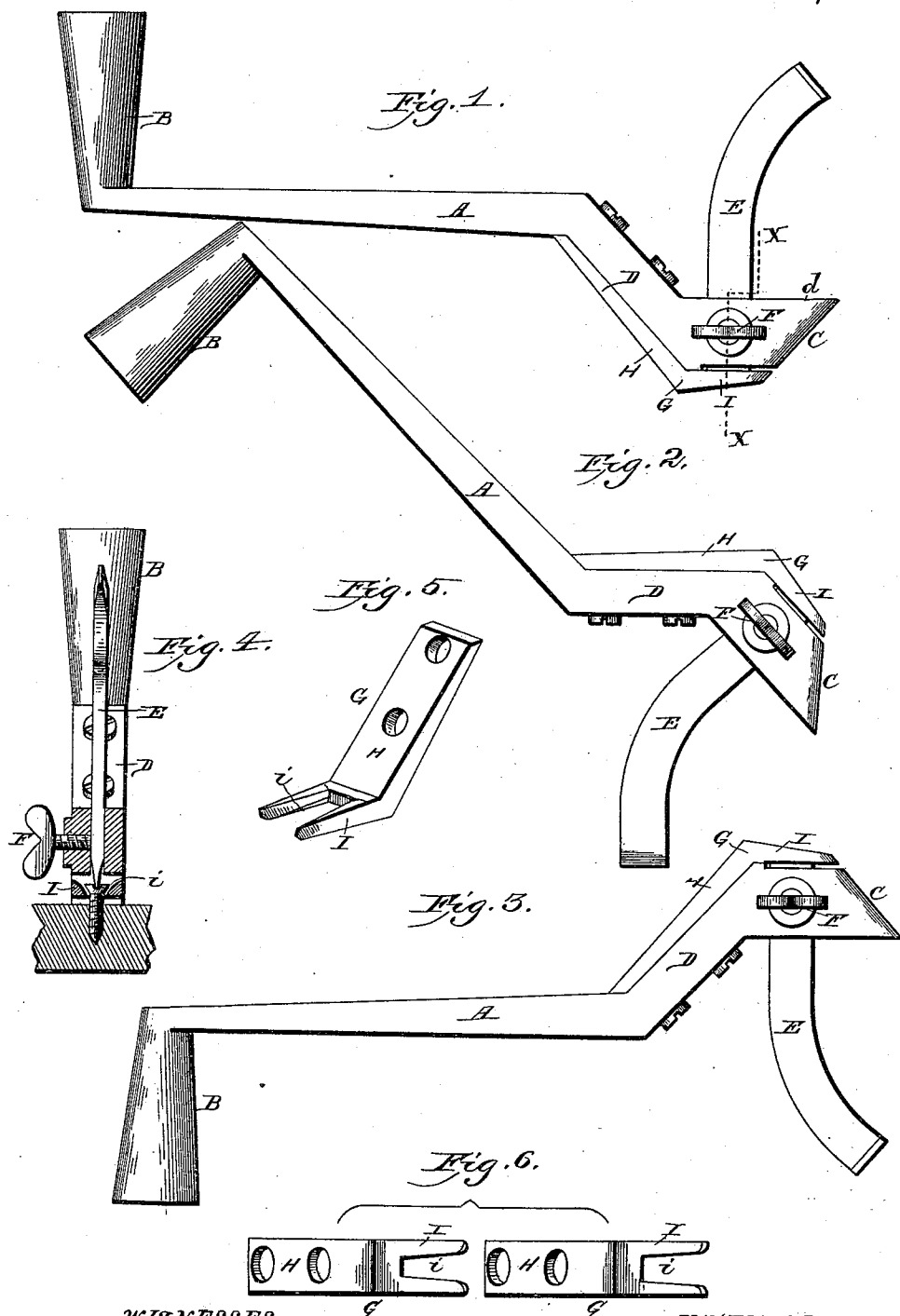


(No Model.)

T. H. BUFFINGTON.
SCREW DRIVER.

No. 466,220.

Patented Dec. 29, 1891.



WITNESSES
F. L. Ouraud.
Van Buren Hillyard.

INVENTOR
Thomas H. Buffington.
By R. A. Lacey
his Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS HENRY BUFFINGTON, OF BERRYSBURG, PENNSYLVANIA.

SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 466,220, dated December 29, 1891.

Application filed January 27, 1891. Serial No. 379,241. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HENRY BUFFINGTON, a citizen of the United States, residing at Berrysburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Screw-Drivers; 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 appertains to make and use the same.

This invention relates to screw-drivers of that class which retain the screw during the operation of the tool and which can be manipulated by one hand.

The object of the invention is to combine in one implement means for sticking or driving the screw to start it, a screw-driver blade to engage with the slot in the screw-head, and a holder to retain the screw in engagement with the said blade, the latter being double-ended and having the projected end so disposed with reference to the handle that pressure can be brought to bear in direct line with the screw, when giving the latter the finishing turn, to hold the blade in the slot in the screw-head, when the outer end of the handle will be free to be grasped and rotated to drive the screw home.

The improvement consists of the novel features which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a side view of a screw-driver embodying my invention. Fig. 2 is an inverted view of the tool, showing its relative position when giving the last turn to the screw or when starting a screw that has already been driven. Fig. 3 is a side view of the tool, showing its application when sticking or driving in the screw prior to the turning of the screw. Fig. 4 is a cross-section on the line X X of Fig. 1, showing the screw-driver blade in full and the application of the tool. Fig. 5 is a perspective view of the holder detached. Fig. 6 is a bottom plan view of the removable holders, showing them provided with different-sized throats or screw-receiving slots.

The implement comprises the handle A, which is provided at one end with the ham-

mer B and at the opposite end with the head C, which is in a different plane from the handle A and is connected therewith by the oblique portion D. The front end of the head C is beveled and projects some distance in advance of the screw-driver blade to give stability to the tool and present a rest *d* for the thumb to obtain a purchase on to steady the tool when giving the first turns to the screw. The head is vertically apertured and receives the screw-driver blade E, which is adjustable therein, being held in the required position in the head by the binding-screw F. The screw-driver blade is double-ended and deflected between its ends, so that the projected end is about opposite and at right angles, or approximately so, to the oblique portion D of the handle. By this construction pressure can be conveniently applied to the said oblique portion D when operating the tool to give the finishing turn to the screw or when applying the tool to start a screw that has been previously driven home, the said oblique portion D forming a cross-head, so to speak, for the hand to obtain a purchase upon when exerting the force necessary to hold the screw-driver blade E on the screw.

The holder G is composed of the shank H and the head I, which is slotted or provided with the throat *i* to receive the stem of the screw just below the head. The sides of the throat or screw-stem receiving slot *i* flare upwardly in conformity to the taper of the screw-head and incline or increase in thickness slightly from front to rear to permit a close fit between the tool and the screw, so that the latter may be grasped firmly. Obviously if the screw is held loosely a movement of the tool to bring the screw nearer the closed end of the throat or slot *i* will tighten the grasp.

In the construction of the tool it has been found advantageous to leave a small space between the heads C and I, as shown, as the efficiency of the tool is thereby increased, it being adapted for different-sized screws by changing the position of the screw-driver blade. However, when adapting the tool for large screws when set for small screws, or vice versa, the holder must be removed and replaced by another of proper size, because the throat of a holder for large screws would not

retain the head of small screws and the throat of a holder for small screws would not receive the stem of large screws.

The holder is secured to the handle in any
5 convenient manner, preferably by screws which pass through the shank of the holder and the oblique portion D of the handle, as shown.

To stick the screw it is struck one or more
10 smart blows by the hammer B, after which the tool is adjusted on the screw and rotated to turn the screw home. Obviously the projected end of the screw-driver blade must be applied to give the finishing turn to the screw,
15 because the holder will not admit of the screw being turned down flush with the work in which the screw is entering.

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

1. A screw-driver comprising a handle having a head at one end and an oblique portion between the head and the handle, and a screw-driver blade secured to the said head and deflected between its ends and having the deflected portion of the said blade at right angles with the said oblique portion of the handle, substantially as described, for the purpose specified.

30 2. The combination, with the handle having a slotted head at one end, which head is beveled and projected in front of the said slot to form a finger-rest, of a holder secured to the said head and having a slot to receive the
35 head of the screw, a screw-driver blade inserted in the said slot in the head, and a bind-

ing-screw for adjustably securing the said blade in the head, substantially as described.

3. The combination, with the handle having a head, and the screw-holder G, of the double-
40 ended screw-driver blade having one end to coact with the holder G and having the other end projected and free to be applied to a screw to give it the finishing turn, substantially as set forth.

4. The combination, with the handle having a head C, and the screw-driver blade adjustably secured to the said head, of the holder
45 secured to the handle and having a slotted head I and having a space between the heads C and I, substantially as described.

5. A screw-driver comprising a handle having a head at one end, to which is secured the screw driving and holding appliances, and having a hammer at the opposite end, which
55 also forms a crank, substantially as described.

6. A screw-driver comprising a handle having a hammer at one end and a head at the opposite end, connected therewith by an oblique portion, a holder secured to the handle,
60 a screw-driver blade deflected between its ends and having its projected portion at right angles to the said oblique portion, and means for adjustably connecting the screw-driver blade with the said head, substantially as de-
65 scribed.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS HENRY BUFFINGTON.

Witnesses:

HENRY HOOVER,
KIRBY J. KLINGER.