

No. 624,875.

Patented May 9, 1899.

B. E. SAWYER & W. D. ARNOTT.
SCREW DRIVER.

(Application filed Sept. 13, 1898.)

(No Model.)

Fig. 1.

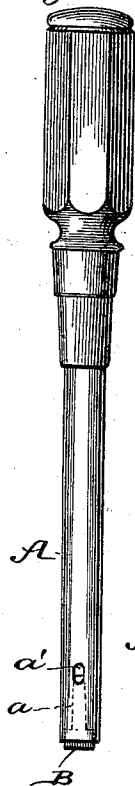


Fig. 3.

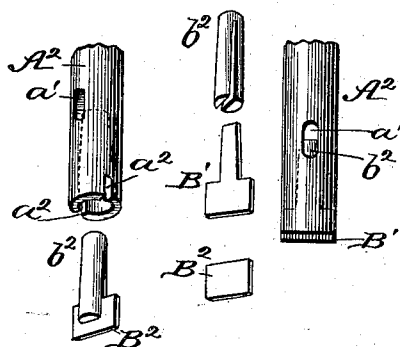


Fig. 2.

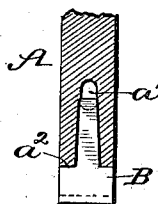
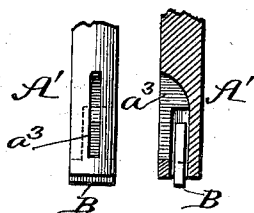


Fig. 4.



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BURNSIDE E. SAWYER AND WILLIAM D. ARNOTT, OF ATHOL, MASSACHUSETTS.

SCREW-DRIVER.

SPECIFICATION forming part of Letters Patent No. 624,875, dated May 9, 1899.

Application filed September 13, 1898. Serial No. 690,842. (No model.)

To all whom it may concern:

Be it known that we, BURNSIDE E. SAWYER and WILLIAM D. ARNOTT, of Athol, in the county of Worcester and State of Massachusetts, have invented a new and Improved Screw-Driver, of which the following is a specification.

As is well known, the sides of the blade or point of the ordinary screw-driver are beveled, and hence the same is liable to slip out of the nick of a screw or to upset the edges of the nick, and thus deface and injure the screw-head.

We have devised an improvement by which a series of insertible and removable parallel-sided or flat blades made of high-grade or tool steel are provided for one common holder or stock, whereby the following advantages are attained:

First. The insertible flat blades are of uniform thickness and inserted in a holder not necessarily made of tool or high-grade steel. The sides of the blade being parallel and made to fit slots of standard screws it will not slip out when great strain is put upon it, as in the case of screw-drivers having the ordinary wedge-shaped point.

Second. In case a blade is broken (which is a very common occurrence) a new one can be inserted at a trifling cost, thus putting the tool in its original condition with but little delay.

Third. A very important point is, as the blade does not project beyond the face of the stock enough to bottom in the slot in the head of the screw, the face of the head of the screw rests upon the end of the stock, thereby steadying the tool and enabling it to drive home the screw straight without danger of its wobbling about or flying off and injuring any work upon which it is used. Another strong point is that the support of the stock is brought down so far on the blade as to enable a greater strain to be applied without danger of twisting or breaking the blade.

In the accompanying drawings, Figure 1

includes a side view of our improved screw-driver and a central longitudinal section of the lower end of the stock. Fig. 2 is a section showing the blade inserted in the stock. Fig. 3 is a perspective view showing a modification. Fig. 4 includes a side view and section of another modification.

The shank or stock A is provided at its end with a central lengthwise bore a , a transverse hole a' at the upper end of said bore, and a transverse slot a^2 at the lower end of the same, the said slot being arranged at right angles to the transverse bore. A blade B, having a flat tapered shank, Fig. 2, is adapted to fit in said bore a and slot a^2 —that is to say, the blade is essentially T-shaped, the blade proper, b , fitting the slot a^2 and the shank b' fitting the bore a tightly when the device is forced up into place, as shown in Fig. 2. The blade proper, b' , projects from the stock A sufficiently to adapt it to enter a nick in the head of a screw, but it is not intended it shall reach quite to the bottom of the nick, and hence it cannot jam therein.

The transverse hole a' is so located at the upper end of the bore a that a suitable tool may be inserted therein for the purpose of forcing out the blade B when required.

In Fig. 4 the stock A' is provided with a vertical slot a^3 in place of the transverse hole before described. The said slot a^3 is cut in the side of the stock lengthwise and extends inward, so as to communicate with the bore, as shown. The said slot permits the insertion of a tool for ejecting the blade.

In Fig. 3 we show a modification in which the slot A² is constructed, as in Figs. 1, 3, and 4, save that the longitudinal bore is enlarged to adapt it to receive a cylindrical pin b^2 , which is split or slotted longitudinally more than half its length.

The blade B may be T-shaped, as before stated, or it may be constructed without a shank, as shown at B². In either case the blade is inserted and held in the slot of the pin b^2 , as shown, and said pin being forced

up into the bore in the stock A its spring-jaws are caused to clamp the blade firmly, so that it is held with due security.

What we claim is—

- 5 A screw-driver comprising a stock, the end of which is slotted, a central bore in said end affording an annular bearing, a T-shaped blade which fits tightly into said bore and slot, an orifice at the end of such blade suffi-

cient to expose the end of it, so that it may be loosened or ejected from said bore, all practically as shown and described.

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Witnesses:

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