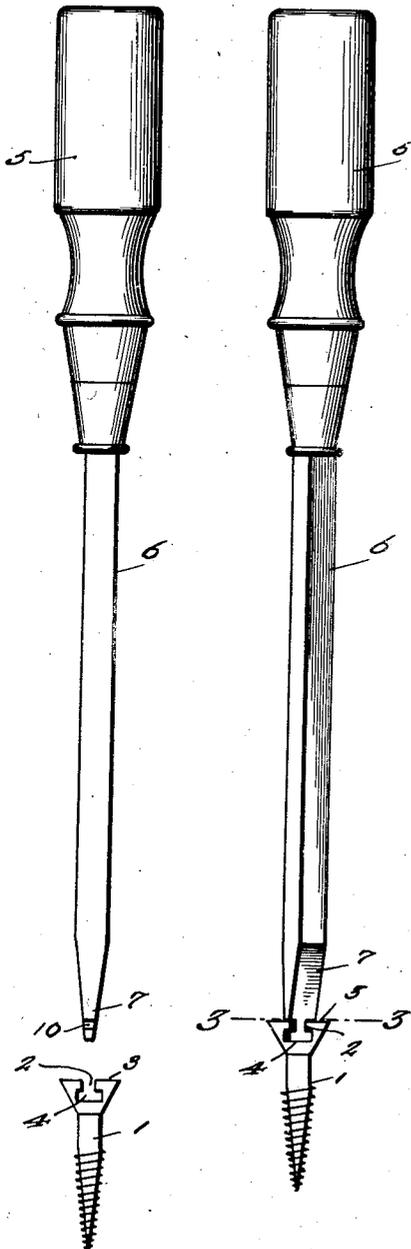


G. W. FAUST.
SCREW DRIVER.
APPLICATION FILED DEC. 11, 1920.

1,411,242.

Patented Mar. 28, 1922.

Fig. 1. Fig. 2.



R. A. Thomas

WITNESSES

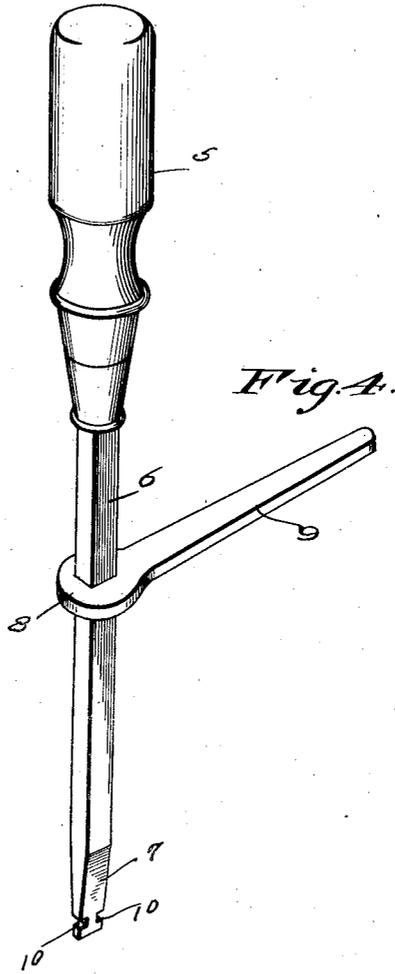
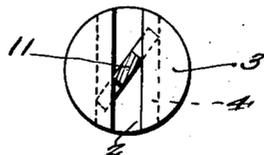


Fig. 4.

Fig. 3.



G. W. Faust

INVENTOR

BY Victor J. Evans

ATTORNEY

UNITED STATES PATENT OFFICE.

GUY W. FAUST, OF AUBURN, PENNSYLVANIA.

SCREW DRIVER.

1,411,242.

Specification of Letters Patent. Patented Mar. 28, 1922.

Application filed December 11, 1920. Serial No. 429,933.

To all whom it may concern:

Be it known that I, GUY W. FAUST, a citizen of the United States, residing at Auburn, in the county of Schuylkill and State of Pennsylvania, have invented new and useful Improvements in Screw Drivers, of which the following is a specification.

My present invention has reference to improvements in screw drivers.

My object is to produce a screw driver which is especially designed for use upon screws that have the kerfs in the heads thereof of a special formation, and in which the walls provided thereby are so engaged by the bit of the screw driver as to permit of the driving of the screw by a torsional force applied to the screw driver without necessitating the application of direct or longitudinal pressure thereagainst, and further wherein the screw will not be accidentally dislodged by disengagement of the screw driver.

The foregoing, and other objects which will appear as the nature of the invention is better understood, may be accomplished by a construction, combination and operative arrangement of parts, such as is disclosed by the drawings which accompany and which form part of this application.

In the drawings:—

Figure 1 is an elevation of a screw driver, constructed in accordance with this invention, and arranged to have its bit engaged in the kerf of a screw for which the screw driver is especially designed.

Figure 2 is a similar view, but showing the bit of the driver received in the kerf of the screw and turned to engage with the walls formed by the kerf.

Figure 3 is a sectional view on the line 3—3 of Figure 2.

Figure 4 is a perspective view of the screw driver showing the adjustable handle on the rectangular shank thereof.

While my improved screw driver may be employed for operation upon screws having their heads formed with the usual transverse kerfs, whose side walls are straight, the improvement is especially designed for use in connection with a screw 1, such as is disclosed by the drawing. The screw 1 has its head provided with a transverse kerf 2, whose side walls are parallel and straight. The head 3 of the screw 1, below the kerf 2 has a substantially rectangular trans-

versely arranged slot 4 with which the kerf 2 centrally communicates.

My improved screw driver includes a handle 5 provided with a metal shank 2 that terminates in a bit 7. The shank 6 is square or rectangular in cross section, and the bit is of a width slightly less than that of the shank, the edges of the said bit being arranged at a slight inclination from the end thereof to the shank, while the opposed faces of the bit are beveled at a more determined angle from the shank to the end of the said bit. This arrangement permits of the arrangement on the rectangular shank of the socket end 8 of the handle member 9. The handle is arranged at an angle with respect to the socket, and may be used in connection with the ordinary handle 5 in turning the screw driver. As the handle 9 is adjustable on the shank 6, the employment thereof will be found greatly desirable when the screw 1 is to be inserted in particularly hard wood, and also when the screw is of the machine type and is employed in connecting metallic plates.

The bit 7 has its sides, adjacent its entering point notched, as at 10. The walls between the notches are spaced a distance from each other slightly greater than the distance between the inner wall of the transverse groove or channel 4 and the outer face of the head 3 of the screw 1. The portion 11 between the notches 10 may be of a material width so as not to weaken the device at this point. The depth of the notches 10 is sufficient to permit of the diagonally opposed corners of the T-head provided at the bit end of the driver, contacting with the inner or side walls provided by the groove 4, and the same diagonal corners of the connecting element or shank 11 contacting with the opposed walls provided by the kerf 2. When the screw driver is so arranged in the head of the screw, the latter cannot be accidentally removed from the former. Also in such position a direct longitudinal force against the screw driver is not necessitated, it being merely necessary to turn the screw driver with the screw and thus merely a torsional force is applied to the screw driver. The angularly arranged adjustable handle 9 will materially assist the operator in either driving the screw home or removing the same, and it is believed that a further description of the im-

provement or the operation thereof will not be necessary.

Having described the invention, I claim:—

5 The combination with a screw driver shank of angular form in cross-section, the forward end portion of which is arranged entirely within the planes of the sides of its major portion, and a handle on the rear end portion of the shank; of a supplemental,
10 one-piece handle, applicable and removable over the forward end of the shank and hav-

ing an angular aperture adjacent to one end directly and snugly receiving the major portion of the shank, said supplemental handle extending at right angles to the major portion of the shank whereby the gravitational action of its opposite end will tend to hold it to the shank and against casual movement in the direction of the length thereof. 15 20

- In testimony whereof I affix my signature.
GUY W. FAUST.