

D. H. ROYER.
 SCREW HOLDER FOR SCREW DRIVERS.
 APPLICATION FILED APR. 8, 1912.

1,047,992.

Patented Dec. 24, 1912.

Fig. 1.

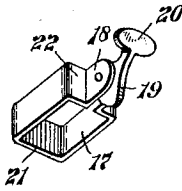
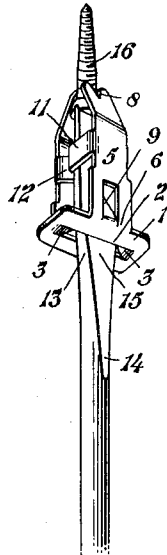


Fig. 2.

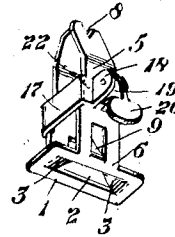


Fig. 3.

Fig. 4.

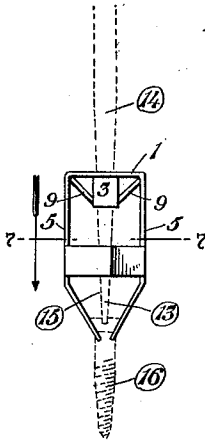
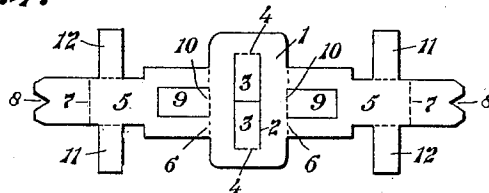


Fig. 5.

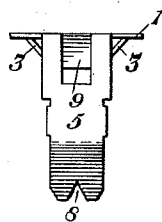
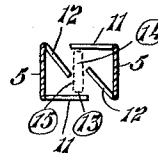


Fig. 6.

Fig. 7.



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UNITED STATES PATENT OFFICE.

DAVID H. ROYER, OF NEAR HARTVILLE, OHIO.

SCREW-HOLDER FOR SCREW-DRIVERS.

1,047,992.

Specification of Letters Patent.

Patented Dec. 24, 1912.

Application filed April 8, 1912. Serial No. 689,251.

To all whom it may concern:

Be it known that I, DAVID H. ROYER, a citizen of the United States, residing near the town of Hartville, in the county of Stark and State of Ohio, have invented a new and useful Screw-Holder for Screw-Drivers, of which the following is a specification.

My invention relates to devices for holding screws on screw drivers so that same may be properly started in places or positions where it is impossible to hold the screw with the hand, and especially to a simple form of such devices such as will hereinafter be fully described.

The objects of the invention are to generally improve devices of the character mentioned and to provide a screw holder for screw drivers which may be temporarily applied to any ordinary screw driver without making any change in the construction of the screw driver bit and which may be readily and quickly removed from the screw driver when it is not needed.

Further objects are to provide a device of the character described which may be stamped from sheet metal and thus be both easily and cheaply made, and which will be effective and convenient in use.

These objects, together with other objects apparent to those skilled in the art may be attained by the construction illustrated in the accompanying drawings, although the invention may be embodied in other forms, the construction illustrated being chosen by way of example.

In the drawings Figure 1 is a perspective view of a screw driver bit in engagement with a screw, and a screw holder embodying my invention in proper position to hold said screw. Fig. 2 is a perspective view of the auxiliary clamp for use on the screw holder. Fig. 3 is a perspective view of the screw holder with the auxiliary clamp attached. Fig. 4 is a plan view of the blank of sheet metal from which the screw holder is made. Fig. 5 is an end elevation of the screw holder, showing a screw driver bit and screw in dotted lines. Fig. 6 is a side elevation of the screw holder. Fig. 7 is a sectional view on the line 7—7 of Fig. 5.

Throughout the several views similar reference numerals indicate similar parts.

The screw holder is stamped from sheet metal, the blank from which same is formed being illustrated in Fig. 4. The head 1 is provided with the bit receiving slot 2 by

forming the first bit engaging tangs 3 and bending same downwardly along the dotted lines 4. At opposite sides of the head 1 the integral spring arms 5 are provided which are bent at 6 into parallel, spaced position with reference to each other, at right angles to the plane of the head 1. The free ends of the arms 5 are inwardly bent along the dotted lines 7, and the extreme ends of said arms are properly formed for engagement with a screw, such formation preferably consisting of the screw holding notches 8. Stamped out of the upper portions of the arms 5 the second bit engaging tangs 9 are bent inwardly along the dotted lines 10. Formed integrally with the arms 5 and adjacent the free ends thereof, but above the lines 7 the third and fourth bit engaging tangs 11 and 12 are provided, the tangs 11 being bent substantially at right angles to the planes of the arms 5, and the tangs 12 being bent farther inward than the tangs 11.

It will be understood that the device should be made of spring material so that the spring arms 5 may securely hold a screw between their opposed free ends. The various tangs mentioned, however, should be sufficiently bendable so that the device may be adjusted for use on the particular screw driver for which it is intended. Such adjustment is accomplished by bending the tangs 3 until their free ends engage the edges 13 of the screw driver bit 14 while the tangs 9 should be so bent that their free ends engage the flat sides 15 of the bit. The tangs 3 and 9 thus hold the upper portion of the screw holder, including the head 1 in proper position with relation to the bit 14. In order to give the free ends of the arms 5 some support with reference to the bit 14 the tangs 11 should be bent inwardly until they engage the edges 13 and the tangs 12 should be so bent as to somewhat loosely engage the sides 15 in order that the arms 5 may be free to properly hold a screw between them. From an inspection of Figs. 1, 5 and 7 the relation of the various tangs when in their proper positions with reference to the bit will be readily understood.

In practical use the screw holder may be carried in the pocket or kept in other convenient location and applied to the screw driver bit when needed, the screw driver at other times being entirely free from annoying attachments or special formation. In applying the holder to the bit it is only

necessary to insert the point of said bit into the slot 2 and push the same down between the various bit engaging tangs into substantially the position shown in Figs. 1 and 5.

5 A screw, such as illustrated at 16 may then be readily inserted between the free ends of the spring arms by forcing the same in from the edge of the device, as will be clearly understood from Fig. 5. When the screw
10 has been received into the notches 8 it will be firmly held by the arms 5, and the point of the bit 14 may then be entered into the slot of the screw, whereupon the screw will be firmly held and may be entered into the
15 wood or other material into which it is to be driven without being held except by the screw holder. When the screw has been sufficiently started the screw holder may be removed from the bit 14 and the screw
20 driven home by the screw driver only.

In some instances it may be desirable to apply an extra clamping force upon the screw and for use in such cases I provide the auxiliary clamp illustrated in Figs. 2
25 and 3. It will be understood that said clamp consists of a rectangular band 17 formed of a single strip of metal with its ends turned outwardly to form the spaced ears 18 between which and to which is pivotally connected the eccentric lever 19 provided with the thumb piece 20. In applying the clamp
30 to the screw holder the band is merely slipped over the free ends of the arms 5 and brought to a position substantially midway between the head 1 and the free ends of said
35 arms, as shown in Fig. 3. The portion 21 of the band then engages one of the arms 5 and the opposite portions 22 engage the other arm. The band should be made of
40 such size as to snugly fit upon the arms and to thus frictionally maintain its position when the device is in the unclamped condition. The unclamped position of the lever 19 is illustrated in Fig. 2. To clamp the
45 arms 5 upon the screw it is only necessary to place the thumb against the thumb piece 20 and move the same backward into the position illustrated in Fig. 3, whereupon the eccentric portion of the lever 19 will engage
50 the adjacent arm 5 and move the same to-

ward the other arm 5, thus increasing the clamping force of the two arms upon the screw, as will be well understood by those skilled in the art.

A consideration of the above description, 55 with the drawings, will disclose how very readily and cheaply a screw holder of my invented construction may be made. While being a very useful and practical tool or attachment it may be placed upon the market 60 at slight cost and at the same time will prove thoroughly efficient and practical in every respect.

I claim:—

1. A screw holder for screw drivers com- 65 prising a head provided with a slot, integral first tangs at the ends of said slot, integral spring arms at opposite sides of said head extending at right angles to the plane of said head and parallel with each other and 70 their free ends adapted to engage the head of a screw, second tangs stamped from the upper portions of said spring arms, and integral third and fourth tangs formed on said arms intermediate their ends, said slot 75 adapted to receive a screw driver bit, said first and third tangs adapted for engagement with the edges of said bit and said second and fourth tangs adapted for engagement with the sides of said bit. 80

2. A screw holder for screw drivers 80 formed from a blank stamped from sheet metal, said blank comprising a head portion provided with integral tangs adapted to be bent out of the plane of said head portion to 85 form a screw driver bit receiving slot, integral arm portions extending from opposite sides of said head portion and provided with integral tangs stamped from the bodies of said arm portions and with other integral 90 tangs projecting from the edges of said arm portions.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

DAVID H. ROYER.

Witnesses:

JOHN H. BISHOP,
HAZEL F. OWEN.