

H. F. LARAVA.
SHEET METAL THUMB NUT.
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1,044,791.

Patented Nov. 19, 1912.

Fig. 1.

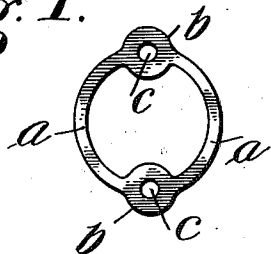


Fig. 2.

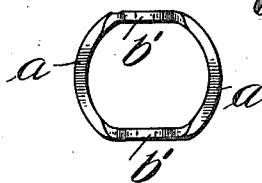


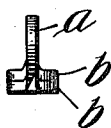
Fig. 3.



Fig. 4.



Fig. 5.



Witnesses

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SHEET-METAL THUMB-NUT.

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To all whom it may concern:

Be it known that I, HENRY F. LARAVA, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Sheet-Metal Thumb-Nut, of which the following is a specification.

The principal objects of this invention are to provide a thumb nut or the like of such a character that it can be made readily and cheaply, mostly on presses.

Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings, in which,

Figure 1 is a plan of a blank from which the thumb nut is to be made; Fig. 2 is a similar view showing the second step of the method of manufacture; Fig. 3 is a similar view showing the completed thumb nut in side elevation; Fig. 4 is a central longitudinal sectional view of the same; and Fig. 5 is an end view thereof.

This invention is made with the idea of making a thumb nut such as shown in Figs. 3, 4 and 5 from a blank of sheet metal without machining, except to make a screw thread, and without undue waste of material. For this purpose the first step of the method of manufacture consists in the production by ordinary stamping methods of a blank such as shown in Fig. 1 comprising a pair of arms *a* located opposite each other and bowed outwardly so as practically to constitute a portion of a circle, and having on opposite sides a pair of flat circular portions or enlargements *b* each provided with a perforation *c*. These elements as will be understood are all in a single plane as they are stamped out of a piece of sheet steel or other metal. The arms integrally connect the two circular enlargements. The next step is to twist the two circular enlargements through an angle of substantially 90 degrees so that they will come into the position *b'* in Fig. 2. This produces a slight twist in the ends of the arms next to the enlargements and brings the two enlarge-

ments into line with each other so that when crushed together as indicated in Fig. 3 by an ordinary stamping process (the third step) the two perforations *c* will register with each other as will the other parts of the two enlargements. This is shown in Fig. 3. This also results in doubling the arms *a* over into substantially the form shown in Fig. 3 in which they form hollow wings for the thumb nut. In order to complete the thumb nut the perforations *c*, now in registration, are provided with a continuous screw thread *d*. It will be seen therefore that the completed article consists of a nut proper formed of two pieces of sheet metal *b* forced together face to face and having a continuous screw-threaded hole through them and that the wings of the nut are formed by the arms *a* bent over each other at the ends.

This provides a light and simple thumb nut having substantially the shape now well known in this industry and formed of sheet metal, all parts being integrally connected so that the thumb nut is very strong and durable. On account of the method of manufacture also it will be obvious that the thumb-nuts will come out substantially uniform and admirably adapted to serve the purposes for which they are intended.

Although I have illustrated and described a preferred embodiment of the invention and a preferred series of steps by which the method is carried out, I am aware that many modifications can be made in both without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to all the details herein shown and described, or to the precise order of steps indicated, but

What I do claim is:—

1. As an article of manufacture, a thumb nut having a nut proper consisting of two pieces of sheet metal lying face to face and having opposite arms integral with both pieces.

2. As an article of manufacture, a thumb nut comprising a nut proper consisting of

two pieces of perforated sheet metal lying
face to face, the perforations registering and
having a continuous screw thread, and pro-
vided with a pair of opposite wings, each
5 consisting of an arm integral with both
pieces of sheet metal and bent into a loop.
In testimony whereof I have hereunto set

my hand, in the presence of two subscribing
witnesses.

HENRY F. LARAVA.

Witnesses:

EDWARD D. R. MORRELL,

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