Feb. 11, 1941. E. R. HARRINGTON 2,231,068

METAL FASTENER

Filed Aug. 30, 1940

Fig. 1.

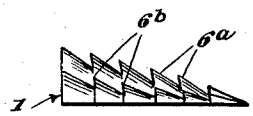


Fig. 2.

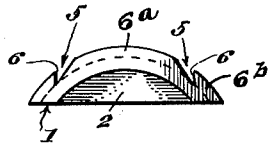


Fig. 3.

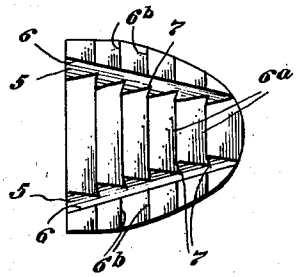


Fig. 4.

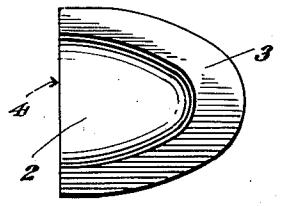


Fig. 5.

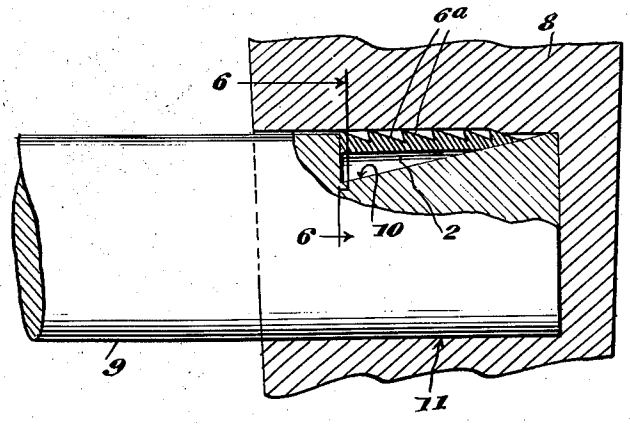
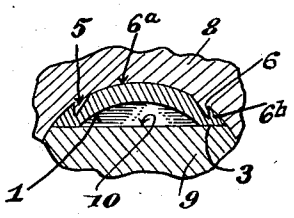


Fig. 6.



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METAL FASTENER

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Application August 30, 1940, Serial No. 354,911

2 Claims. (Cl. 20—92)

This invention relates to a metal fastener.

An object of the invention is the construction of a novel and efficient fastener which will positively hold two elements together against accidental displacement.

Another object of the invention is the construction of a metal fastener which is adapted to be interposed between two parts or two units, whereby they cannot be turned, one with respect to the other, nor separated by a drawing or a thrusting action.

With the foregoing and other objects in view, the invention comprises certain novel constructions, combinations, and arrangements of parts as will be hereinafter fully described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims.

In the drawing:

Figure 1 is a view in side elevation of a metal fastener constructed in accordance with the present invention.

Figure 2 is a rear end view of the metal fastener.

Figure 3 is a top plan view.

Figure 4 is a bottom plan view.

Figure 5 is a view of two units, fastened securely together by my fastening device, and showing the metal fastener in longitudinal central section.

Figure 6 is a transverse section view taken on line 6—6 Fig. 5, and looking in the direction of the arrows.

Referring to the drawing, in which I have shown the preferred embodiment of my invention, 1 designates an elongated plate-like body that is provided with a central concaved portion 2 in its bottom and with a flat base-edge or rim 3. The concaved portion 2 is open at end 4. The body 1 is provided with an upper or outer face, with two longitudinally-extending grooves 5. Each groove 5 is provided with a vertically-extending wall 6 that constitutes a cutting edge, for the purpose hereinafter described. A row of rearwardly-extending central teeth 6a is formed upon the body and by reason of the grooves 5 each tooth 6a is provided at its ends with outwardly-extending spur-like ends 7. These teeth 6a and ends 7 efficiently engage or enter portions of the primary unit 8 for preventing withdrawing of the auxiliary unit 9 when the parts are assembled. The vertically-extending walls 6 of grooves 5 enter the primary unit 8 (Fig. 6) whereby the auxiliary unit 9 cannot be rotated when the parts are assembled. The primary unit 8 may be an ordinary chair leg, and the auxiliary unit 9 may be an ordinary chair spoke or rung.

The body 1 is provided between its side edges and the grooves 5 with auxiliary, small teeth 6b that also penetrate the primary unit 8 when the parts are assembled.

To place my metal fastener in position, a groove or cut-out portion 10 is formed on the auxiliary unit (Fig. 5) and the plate-like body 1 is laid in this groove prior to the auxiliary unit being forced into the socket 11 of the primary unit 8. When the parts are assembled, as in Figure 5, the fastening device securely retains said parts in an assembled position. Therefore, it will be seen that the auxiliary unit 9 cannot have a rotary movement during its assembled position, nor can auxiliary unit be withdrawn when once assembled with the primary unit.

While I have shown in the accompanying drawing the metal fastening assembled in a wooden structure, still it is equally as useful in arts other than a chair, or the like. For instance, it can be used to fasten together metal elements, as well as wood elements.

The construction of the body with the concave portion 2 is for a double purpose, to wit: (1) The material used in forming the body is preferably of such nature as will create a tension or slight springy action whereby the teeth maintain the constant pressure against the engaged portions of the socket 11, resulting in a very efficient grip, and allowing no slip, or working loose of the assembled parts. (2) It creates an indentation upon the wood, and does not compress the wood, as a solid body would do, whereby the portion of the auxiliary unit entering the concave portion 2 will assist in holding the fastening device in place as well as all of the parts together. In other words, that part of the auxiliary unit 9 that enters the concave portion 2 acts something like a tooth engaging the metal fastener.

It is to be understood that the size of the fastener can be changed, and that different materials may be used in constructing the fastener, insofar as I do not depart from the spirit of the invention.

While I have described the preferred embodiment of my invention and illustrated the same in the accompanying drawing, certain changes or alterations may appear to one skilled in the art to which this invention relates, during the extensive manufacture of the same, and I, therefore, reserve the right to make such changes or alterations as shall fairly fall within the scope of the appended claims.

What I claim is:

1. A metal fastener comprising a body provided

in its upper face with longitudinally-extending grooves, each groove provided with a vertical side wall constituting a cutting edge, said body provided with central teeth, and said central teeth provided at their ends with spurs overhanging said grooves.

2. A metal fastener comprising an elongated plate-like body having a concave underface and with a flat base-edge or rim, said concave underface open at one end, said body provided on its upper and outer face with longitudinally-extending grooves, each of said grooves provided with an outer vertical wall constituting a cutting tooth, said body provided between each wall and the contiguous side edge with auxiliary teeth, said body provided on its outer face between said grooves with primary teeth, said primary teeth extending rearwardly, and each of said primary teeth provided at its ends with outwardly-extending spurs overhanging said grooves.

EDWARD R. HARRINGTON.