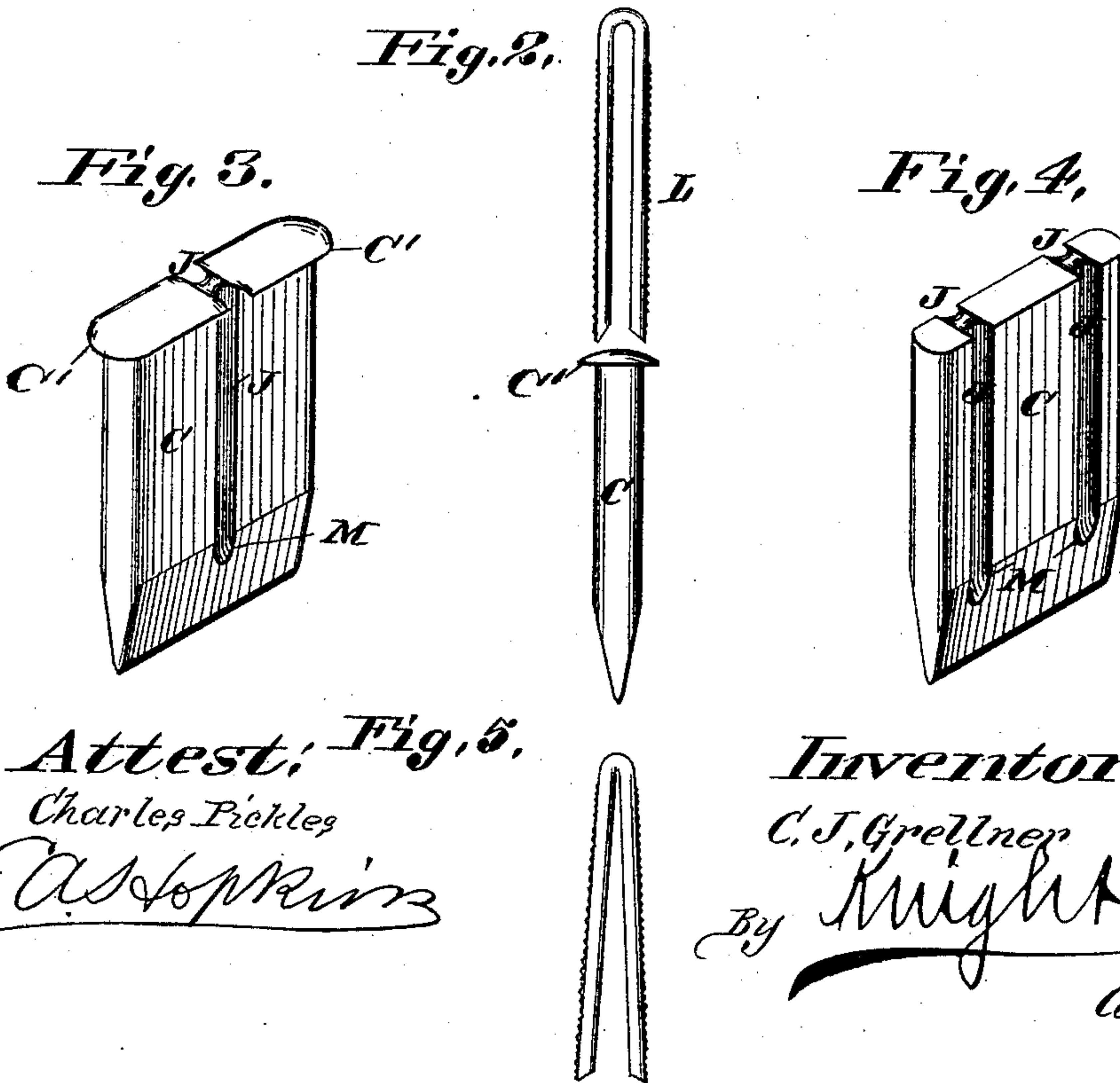
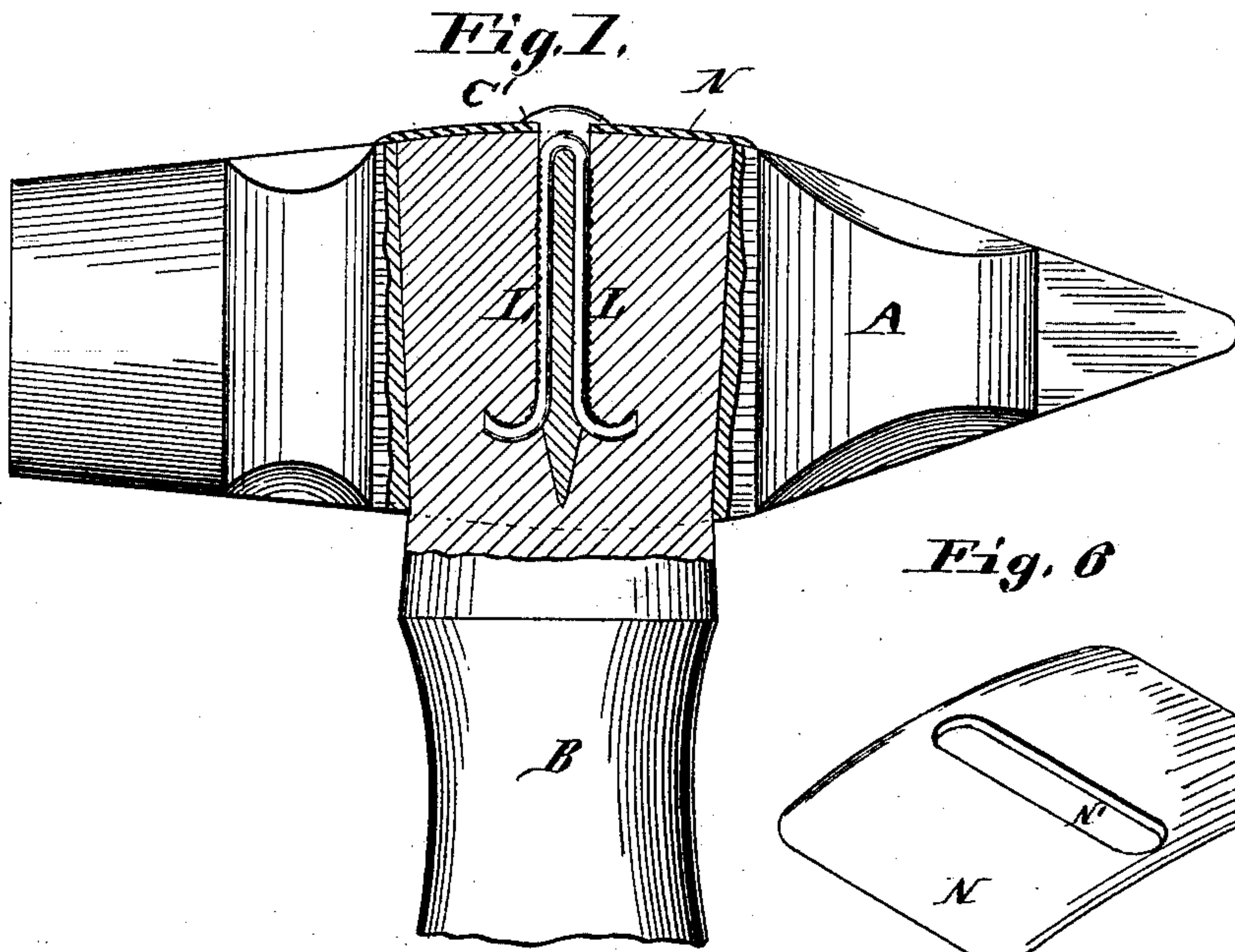


(No Model.)

C. J. GRELLNER.  
HAMMER.

No. 341,475.

Patented May 11, 1886.



# UNITED STATES PATENT OFFICE.

CHRISTOPHER J. GRELLNER, OF ST. LOUIS, MISSOURI.

## HAMMER.

SPECIFICATION forming part of Letters Patent No. 341,475, dated May 11, 1886.

Application filed December 21, 1885. Serial No. 186,325. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTOPHER J. GRELLNER, of the city of St. Louis, in the State of Missouri, have invented a certain new and  
5 useful Improvement in Hammers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

10 Figure 1 is a side view, part in section, of a hammer embodying my invention. Fig. 2 is an end view of the wedge and side view of the split nail or staple. Fig. 3 is a perspective view of the wedge. Fig. 4 is a similar  
15 view in a modified form. Fig. 5 shows a modified form of staple. Fig. 6 is the top plate, which extends at its edges past the eye of the hammer.

20 This invention relates to an improved manner of forming the tightening-wedge, and to the manner of holding it in place; and it consists in features of novelty hereinafter fully described, and pointed out in the claims.

25 Referring to the drawings, A represents the hammer, and B part of the handle.

C represents the wedge, beveled to a point at its lower edge. On each side of the wedge is a groove, J, which receives one leg of a staple or split nail, L, the staple straddling  
30 the wedge, as shown. These grooves turn outward at the lower ends, forming inclines M, against which the lower ends of the staple or nail strike, and which act to turn the lower ends of the staple outward into the wood of the handle, as shown in Fig. 1; and when thus  
35 turned outward this staple or retaining member effectually prevents any danger of the wedge coming out when the hammer is used. The device thus made is cheap and very effect-  
40 ual in its arrangement. If preferred, there can be two sets of grooves made in the wedge, as shown in the modified form, Fig. 4, one near each edge of the wedge; but it is thought

that one set of grooves would be sufficient, as shown in my preferred form.

45 N is a plate fitting over the end of the handle, and extending at the edges past the eye, so that it bears upon the hammer-head. The plate has an aperture, N', through which the wedge C passes. The plate is held down to  
50 the hammer-head by lips C' upon the wedge, which extend over the edge of the aperture N'. This device is of course applicable to other tools where the handle passes through an eye and is retained or may be retained by a wedge. 55

I claim as my invention—

1. The combination, with the tool having an eye therethrough and a handle inserted in said eye, of a grooved wedge driven into the end of said handle and the nail inserted in said  
60 grooves, substantially as and for the purpose set forth.

2. The combination, with the tool having an eye therethrough and a handle inserted in said eye, of a wedge having grooves in its opposite  
65 sides, driven into the end of said handle, and a split nail or staple having its respective prongs driven into said grooves and turned outward at their extremities, substantially as set forth. 70

3. The combination, with a handle passing through the eye of a tool, of a wedge, C, with lips C', and plate N, having an aperture for the passage of the wedge, substantially as and for the purpose set forth. 75

4. The combination, with the tool having an eye formed therethrough and a handle inserted in said eye, of the wedge having a groove terminating in an outward inclination and a nail driven into said groove, whereby  
80 it is turned out or clinched at its extremity, as set forth.

CHRISTOPHER J. GRELLNER.

In presence of—

SAML. KNIGHT,  
BENJN. A. KNIGHT.