(No Model.)

C. J. GRELLNER.

HAMMER.

No. 347,932. Patented Aug. 24, 1886.

Fig. 1.

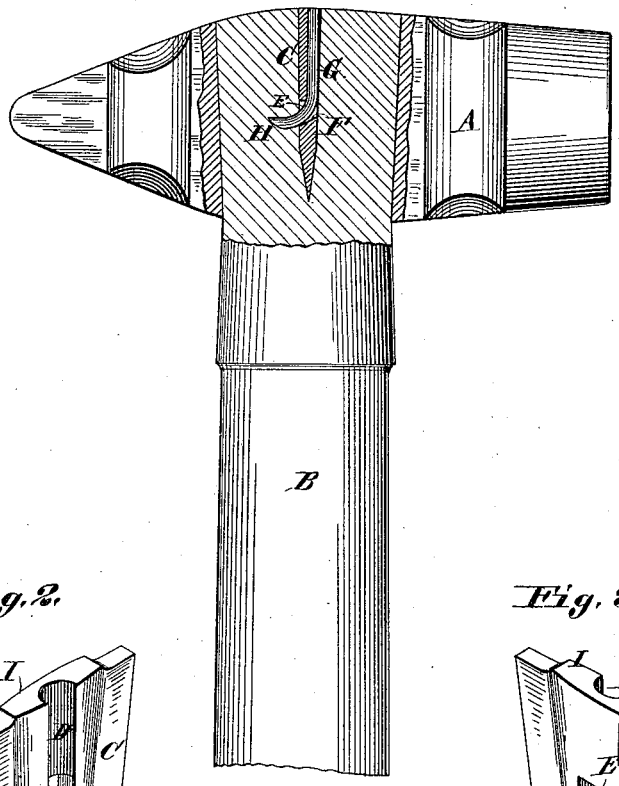


Fig. 2.

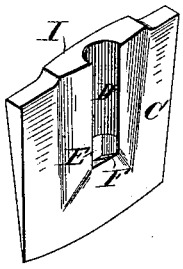


Fig. 3.

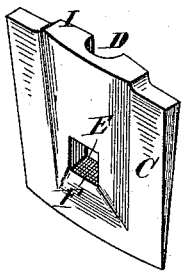


Fig. 4.

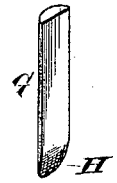
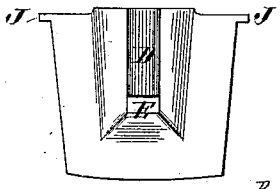


Fig. 5.



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UNITED STATES PATENT OFFICE.

CHRISTOPHER JOSEPH GRELLNER, OF ST. LOUIS, MISSOURI.

HAMMER.

SPECIFICATION forming part of Letters Patent No. 347,932, dated August 24, 1886.

Application filed April 21, 1886. Serial No. 199,650. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER JOSEPH GRELLNER, of the city of St. Louis, in the State of Missouri, have invented a certain new and 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—

Figure 1 is a view showing a hammer head and handle part in section, illustrating my invention. Fig. 2 is a perspective view of one side of the wedge. Fig. 3 is a perspective view of the other side of the wedge. Fig. 4 is a perspective view of the retaining-nail. Fig. 5 illustrates a slight modification of the wedge.

My present invention is an improvement on devices for securing hammer-heads shown in Letters Patent No. 261,338, issued to myself July 18, 1882, and Letters Patent Nos. 341,474 and 341,475, issued to myself May 11, 1886; and it consists in features of novelty, hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the head of the hammer, and B the handle, the latter fitting into an eye in the former.

C represents a wedge driven into the outer end of the handle, to expand the handle and secure the hammer-head thereon. In one side of the wedge is formed a semicircular U-shaped groove, D, extending from the upper end downward a suitable distance, and at the lower end the metal is cut away at the back of the groove, forming an opening, E. The lower wall or floor, F, of this opening inclines downwardly from the grooved side of the wedge.

G represents a retaining-nail, which is U-shaped or semicircular in form in transverse section, corresponding to the shape of the groove D. The lower end of this nail is beveled off at H, the bevel being on the flat or outer side of the nail.

When the wedge is driven into the handle, as shown in Fig. 1, the nail is inserted into the groove, with its rounding side fitting against the rounded side of the groove, so as to form a neat fit. The nail is then driven in, and the incline H will come against the incline F of the wedge, and the lower end of the nail is deflected outward into the wood of the handle, as shown in Fig. 1, thereby securely holding the wedge in place.

The principal object in having the groove D and nail G semicircular in transverse section is to avoid all danger of an inexperienced person driving the nail into the wedge with the wrong side toward the back of the groove, it being necessary that the incline H of the nail should bear against the incline F of the wedge. If the groove and nail were square, with one edge of the latter beveled at H, and the nail were to be driven down, with this bevel turned toward the back of the groove, the desired deflection of the inner end of the nail, as shown in Fig. 1, would not take place. By shaping these parts as I have shown and described they will only fit together in their proper positions, and therefore all danger (as above mentioned) is avoided. The wedge is preferably provided with a raised central portion, I, upon which to strike in driving the wedge, so that the main part of the wedge is driven beneath the wood surface of the handle. The outer edges of the wedge may be provided with lugs J, as shown in Fig. 5, which would extend beyond the eye of the hammer-head, to still further prevent the head from coming off the handle.

My improved wedge can be cheaply and quickly produced, is effectual in filling its function, avoids danger of loss, and can be easily applied by any inexperienced person.

I claim as my invention—

1. A securing device for hammer-heads, consisting of a wedge formed with a groove, and an opening at the lower end of the groove extending through the wedge, and having a downwardly-inclined floor extending from side to side of the wedge, and a nail having an incline at its outer side, substantially as described.

2. A securing device for hammer-heads, consisting of a wedge formed with a U-shaped groove, D, and an opening, E, at the base

of the groove extending from side to side of the wedge, having downwardly-inclined floor F, and a nail, G, U-shaped in cross-section, having beveled lower end, H, substantially as described.

3. A securing device for hammer-heads, consisting of a wedge formed with a groove, D, opening E, having inclined floor F, and upward projection I, and the nail G, having beveled end H, substantially as described.

CHRISTOPHER JOS. GRELLNER.

In presence of—
GEO. H. KNIGHT,
JOSEPH WAHLE.