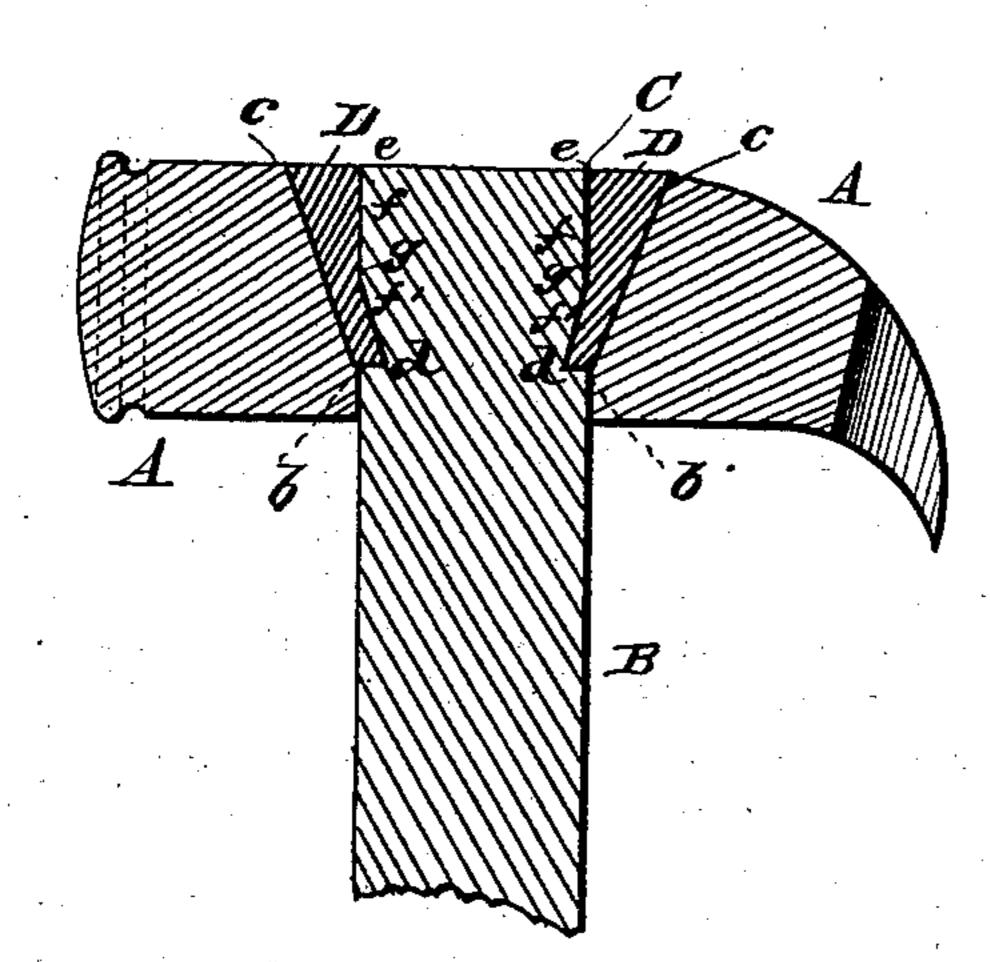
(No Model.)

C. J. GRELLNER.

No. 275,645.

Patented Apr. 10, 1883.

Fig. Z.





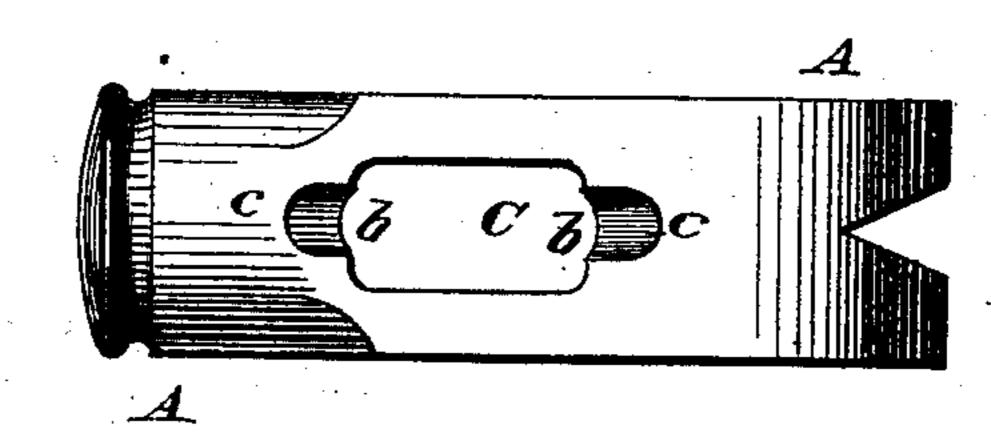
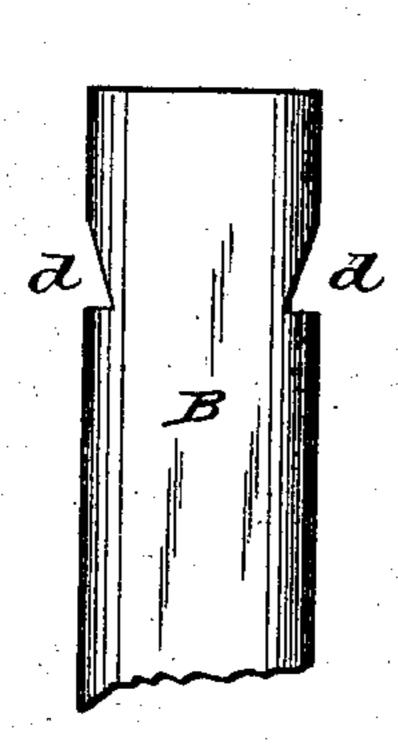
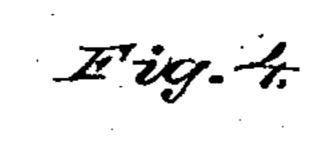
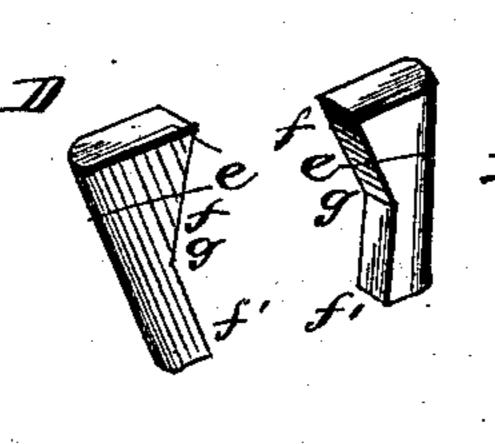


Fig. 3.







WITNESSES:

hed & Dieterich.

Mustopher I Grellner inventor,
by Louise Bagger & C.

United States Patent Office.

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

HAMMER.

SPECIFICATION forming part of Letters Patent No. 275,645, dated April 10, 1883.

Application filed June 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, Christopher J. Grell-NER, of the city of St. Louis, in the State of Missouri, have invented certain new and use-5 ful Improvements in Hammers, Mallets, &c.; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use to the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal section of a hammer-head, showing the application of my im-15 proved wedges or means of fastening the head to its handle. Fig. 2 is a top view of the hammer head. Fig. 3 is a detail view of the top part of the handle, which is inserted into the eyè of the head; and Fig. 4 is a detail view

20 of the wedges detached.

Similar letters of reference indicate corre-

sponding parts in all the figures.

My invention has relation to means for fastening the heads of hammers, mallets, axes, and 25 similar tools upon their handles; and it consists in the construction and arrangement of the wedges by which the head is wedged upon the top of the stock or handle, and in the combination of said wedges with the head and 30 handle, substantially as hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings, A represents the hammer-head, (or head of a mallet, hatchet, 35 or ax, as the case may be,) and B the stock or handle, having recesses d. The head has an eye, C, which is made with two grooves or channels (shown at cc) in the direction of the length of the head, one on each side of the eye; 40 but these channels do not extend from the top of the eye to the bottom thereof, but only to the point marked b, where they merge into the eye proper. The latter may be circular, oblong, square, or rectangular in cross-section, 45 as desired. The top of the stock or handle, or that part which is inserted into the eye C, is of course of a corresponding shape, and is provided upon opposite sides with recesses d, each formed with a shoulder at right angles to 50 the plane of the stock, and a gradual incline parallel with the inclined side of the recesses c, as shown.

D D are the wedges, which are preferably made of steel or malleable iron, and of such a width that they will fit into the side channels, 55 cc, of the eye C. One side of each of the wedges D is straight, as shown at e, while the other presents a broken line, ff', broken at g, so as to leave the upper part or head of the wedge broader than the lower bent part. By 60 reference to Fig. 1 of the drawings the use and application of these wedges will readily be understood without further explanation. After the handle has been inserted into the eye the wedges D D are inserted into their appropri- 65 ate channels or recesses c c and driven home. In this position their lower bent end, ef', below the point g, will enter the notch or groove d in the handle or the wood of the latter, the broad top part, e f, operating as a wedge to 70 clamp the handle from opposite sides within the eye. The greater the tendency of the head is to fly off the greater will be the tenacity of the wedges D D, so that the head will at all times be held firmly and immovably in place 75 upon its stock or handle.

The invention is designed as an improvement upon the patent granted me February 7, 1882, in which the wedge was bent into recesses in the stock by the act of putting the 80 parts in position. In this invention the parts are so constructed that the wedge need only to be driven home to make the proper connection.

Having thus described my invention, I claim and desire to secure by Letters Patent of the 85 United States—

The combination of the head A, having eye C, provided with the lateral recesses or channels cc, extending from the point b in an upward and outward direction, wedges D D, construct- 50 ed with one straight side, e, and one broken side, f f', and handle B, having recesses d, as shown, the whole constructed and combined substantially as and for the purpose herein shown and described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CHRISTOPHER JOS. GRELLNER.

Witnesses: JOHN F. MOHRMAN, Jos. KIRCHER.