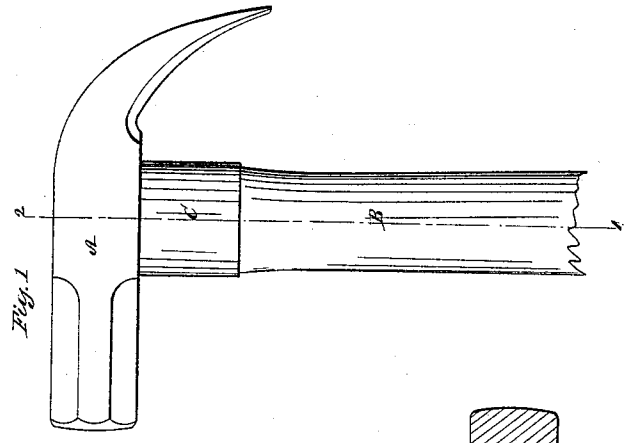
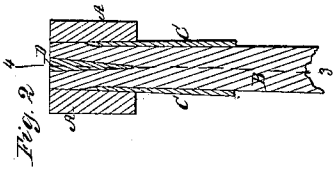
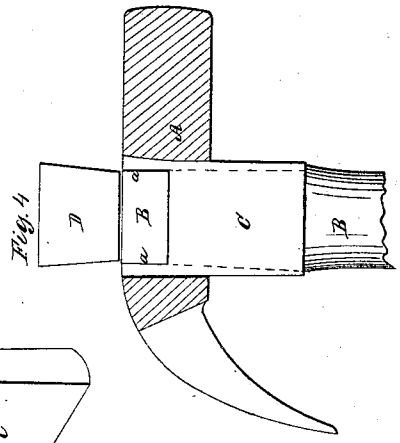
C. Hammond,

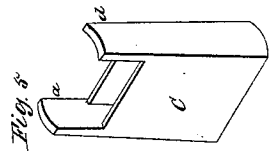
Attaching Hammer Heads to Shafts.

No. 14,058. Patented Jan. 8, 1856.









Witnesses;
Henry Howson
William E Walton

Inventor;
Charles Hammond

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

CHAS. HAMMOND, OF PHILADELPHIA, PENNSYLVANIA.

ATTACHING HAMMER-HEADS TO SHAFTS.

Specification of Letters Patent No. 14,058, dated January 8, 1856.

To all whom it may concern:

Be it known that I, CHARLES HAMMOND, of the city of Philadelphia and State of Pennsylvania, have invented a new and Improved Mode of Securing Hammer-Heads to Their Shafts; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to the class of hammers, known as adz-eyes, used for extracting as well as driving nails, and consists in furnishing the end of the shaft which enters the eye of the hammer head with a socket having two projections. This socket is placed in the eye of the head, and a wedge driven into the top of the shaft, the wedge being of such a form as to bend and compress the projections of the socket against the ends of the eye, which is enlarged at the top of the head, the wedge at the same time compressing the divided top of the shaft against the sides of the eye, thereby attaching the head and shaft firmly together, and enabling me to produce the class of hammers to which my invention relates at a much cheaper rate than hitherto.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the drawing, which forms a part of this specification, Figure 1, is an external view of a hammer head and part of the shaft, as secured together by my improved mode. Fig. 2 is a transverse section of the same on the line 1, 2. Fig. 3, a section on the line 3, 4 (Fig. 2). Fig. 4, a view with the heads of the hammer only in section, and placed on the socket, preparatory to the driving in of the wedge. Fig. 5 is a detached perspective view of the socket. Fig. 6 a sectional view showing one of the present modes of manufacturing the heads of adz eye hammers.

The same letters of reference allude to similar parts throughout the several views.

A is the head of the hammer the eye of which is (longitudinally) somewhat larger at the top than at the bottom, as seen in Figs. 3 and 4.

B is a portion of the shaft, on the top of which I secure the socket C. This is made of malleable iron of the form seen in Fig. 5 with two projecting lips *a a*, the top of the latter being level with the top of the shaft. The hammer head is placed on the socket as seen in Fig. 4 the lower portion of the eye fitting accurately to the socket but the upper edge of the eye, which is enlarged being free from contact with the lips *a a* of the socket.

D is an iron or steel wedge tapering on both its sides and ends. This wedge is driven into the top of the shaft, its tapering ends serving to bend and compress the lips *a a* of the socket C against the ends of the enlarged portion of the eye as seen in Fig. 3, and its tapering sides wedging the top of the shaft firmly against the sides of the eye as seen in Fig. 2, and thus securely attaching the shaft to the head of the hammer.

I would here remark that adz eye hammers, to which my improvements more especially relate, require their heads to be very firmly secured to the shafts on account of such implements being frequently used for extracting nails; to obtain this security various devices have been adopted, the most approved hitherto being that of forging a socket to the underside of the head as seen in Fig. 6, the inside of the socket being a continuation of the eye which thus affords a lengthened space for receiving the shaft; this plan, however, involves the necessity of forging the whole out of cast steel, as no other material could stand the operation without splitting the socket. The process of thus forging the head and socket together is tedious and expensive. My improvements however as above described enable me to use an ordinary malleable iron head with steel face, and the socket being made of malleable cast iron, I can manufacture adz eye hammers, equally as strong as those with the sockets forged to the heads, and at a much cheaper rate than hitherto.

What I claim and desire to secure by Letters Patent is—

The socket C with its projecting lips *a a*, and the wedge D arranged and employed in connection with the head A and shaft B substantially in the manner, and for the purpose set forth.

CHARLES HAMMOND.

Witnesses:

HENRY HOWSON,

WILLIAM E. WALTON.