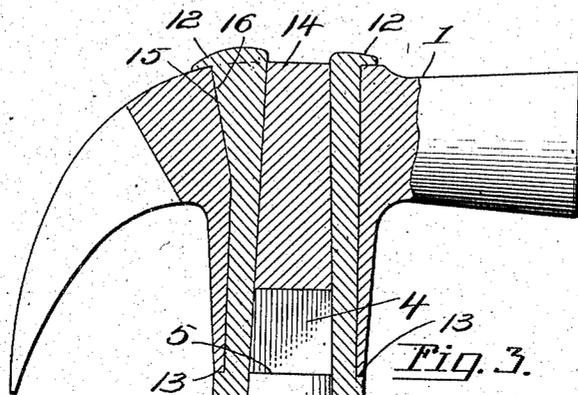


S. T. BAGNALL.  
 IMPLEMENT HANDLE FASTENING.  
 APPLICATION FILED OCT. 30, 1908.

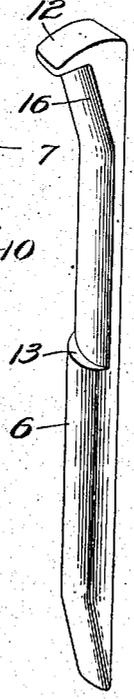
967,703.

Patented Aug. 16, 1910.

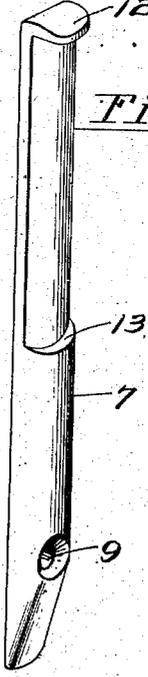
*Fig. 1.*



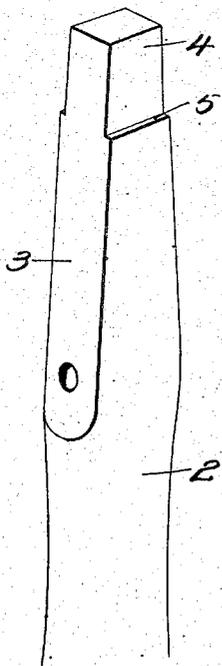
*Fig. 3.*



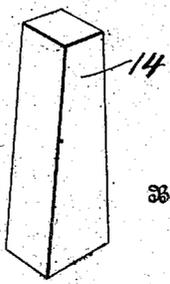
*Fig. 4.*



*Fig. 2.*



*Fig. 5.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

SIDNEY T. BAGNALL, OF ROCHESTER, NEW YORK.

## IMPLEMENT-HANDLE FASTENING.

967,703.

Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed October 30, 1908. Serial No. 460,311.

To all whom it may concern:

Be it known that I, SIDNEY T. BAGNALL, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Implement-Handle Fastenings, of which the following is a specification.

This invention relates to implement handle fastenings, the object in view being to provide an effective, safe and reliable fastening means for securing the head of a hammer, hatchet, ax or the like, to the helve, whereby the head is securely fastened to the handle and whereby a new handle may be readily substituted for an old one by any person of ordinary skill.

A further object of the invention is the provision of a handle fastening which shall be simple durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With the above and other objects in view the invention consists in the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawing, wherein:—

Figure 1 is a sectional view illustrating the application of my improved handle fastening. Fig. 2 is a detail perspective view of one end of the handle. Fig. 3 is a detail perspective view of one of the clips. Fig. 4 is a detail perspective view of the other clip, and Fig. 5 is a detail perspective view of the wedge.

Referring to the drawing by reference numerals, 1 designates the head and 2 the handle of a hammer. The inner portion of the handle 2 is provided with opposite plane sides 3 which incline inwardly in the direction of and extend to the inner end of the handle. At right angles with relation to the sides 3 portions of the handle 2 are removed to provide a reduced extension 4 which is located in the handle socket of the head 1. The provision of the extension 4 forms shoulders 5 which are disposed at right angles with relation to the sides 3 and which engage the inner edge of the hammer head 1, said shoulders limiting the insertion of the inner end of the hammer into the handle socket. The head 1 is secured to the handle 2 by a pair of clips 6 and 7 which are respectively secured to the plane sides 3 of the

handle by a bolt 8. The bolt 8 passes through an opening 9 formed in the clip 7, through an opening 10 formed in the handle 2, and has threaded engagement with a socket 11 formed in the clip 6. Portions of the clips 6 and 7 are located in the handle socket of the head 1, and such portions are reduced to provide lips 12 which are located at the outer ends of the clips and which engage the outer side of the head 1, and to provide shoulders 13 which are located about centrally between the ends of the clips and which engage the inner side of the hammer head, the lips and shoulders forming an interlocking connection between the clips and the head. The inner or opposing sides of the clips 6 and 7 are inclined inwardly in the direction of the head and the clips are maintained in interlocking engagement with the head 1 by means of an outwardly tapering wedge 14. The wedge 14 is located between the clips 6 and 7 and forms no part of the handle 2, and it can only be applied and removed from the inner side of the head 1. In view thereof and in view of the fact that the extension 4 engages its inner end, it is impossible for the wedge to become accidentally displaced. As the wedge 14 cannot become accidentally displaced and as the handle 2 is secured to and between the clips 6 and 7 by the bolt 8, the engagement between the handle and the head 1 is such as to prevent the head from becoming accidentally detached from the handle and is strong, durable and efficient. When the shoulders 5 engage the inner side of the head the opening 10 is in registration with the opening 9 in the clip 7 and the socket 11 in the clip 6, whereby to facilitate the securing of the handle to the clips. As the wedge 14 forms no part of the handle 2, the handle may be removed without removing the wedge, the wedge maintaining the clips 6 and 7 in interlocking engagement with the head 1. One end wall of the handle socket of the head 1 is inclined upwardly and laterally to provide recesses 15, and the clip 6 is increased in thickness adjacent its lip 12, at 16, to occupy said recess.

In practice the clips 6 and 7 are applied to the hammer head 1, after which the wedge 14 is applied, the wedge securing the clips in applied position. The handle is then applied between the clips, the extension 4 of

the handle fitting in the socket of the hammer head. The handle is secured in applied position by means of the bolt 8.

It should be apparent from the above description, taken in connection with the accompanying drawing, that I provide a handle fastening which is simple, durable and efficient, one which will permit the handle to be readily and quickly applied and removed, and one which may be manufactured and sold at a comparatively low cost.

While I have shown and described my invention as applied to a hammer, I wish it to be expressly understood that the same may be used with equally good results on a hatchet, ax, or the like.

Changes in the form, proportions and minor details of construction may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention, what is claimed as new is:—

1. In an implement handle fastening, an implement having a handle-receiving passage formed therein and extending throughout the implement, implement-retaining clips secured to the handle and formed to provide shoulders for engaging the implement to hold the same against longitudinal movement, the said clips being constructed so that the opening in the implement is of wedge-form with its reduced portion outer-

most, and a wedge fitting the opening of the implement and having its inner end abutting the outer end of the handle.

2. In a fastening of the character described, the combination of a hammer-head having one end wall of its handle-socket provided with a recess, of clips reduced to provide lips at their outer ends and shoulders intermediate their ends, the said lips and the said shoulders respectively engaging the hammer-head at the ends of the handle-receiving socket to hold the said hammer-head against longitudinal movement, the said clips being extended through the said handle-receiving socket and the said clips being of tapered construction so that the said handle-receiving socket is of wedge-form, the reduced end of the socket being disposed outermost, a wedge extending longitudinally in the handle-receiving socket and impinging against the inner surfaces of the clips, a handle extending into the socket of the hammer-head and having its outer extremity bearing directly against the enlarged end of the head, and a fastening device extending through the clips and through the handle.

In testimony whereof I affix my signature in presence of two witnesses.

SIDNEY T. BAGNALL.

Witnesses:

FRANK DOEHLER,  
CHAS. J. KUHLMAN.