(No Model.)

O. PECK.

TOOL HANDLE.

No. 379,877. Patented Mar. 20, 1888.

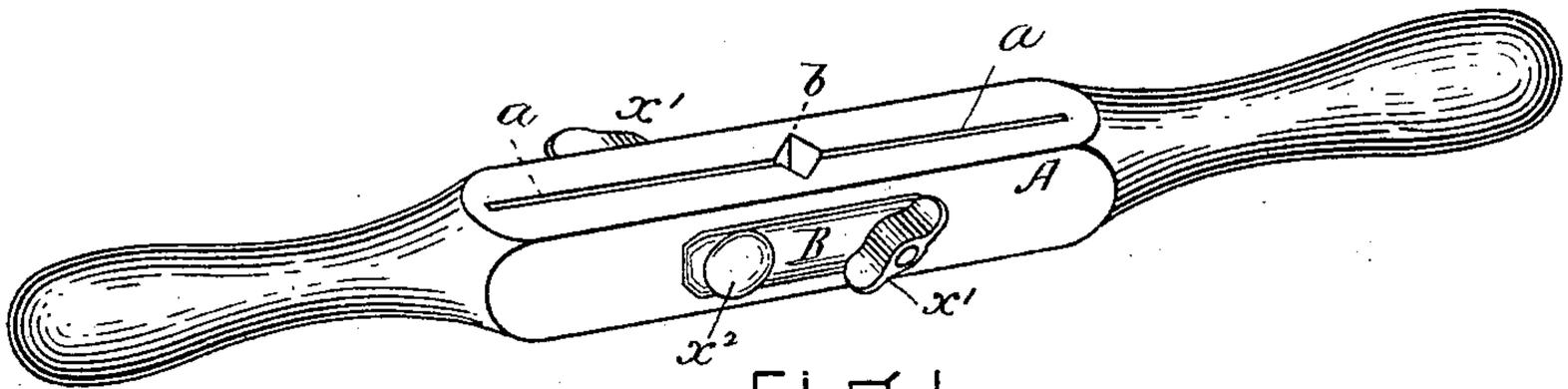

Fig. 1.

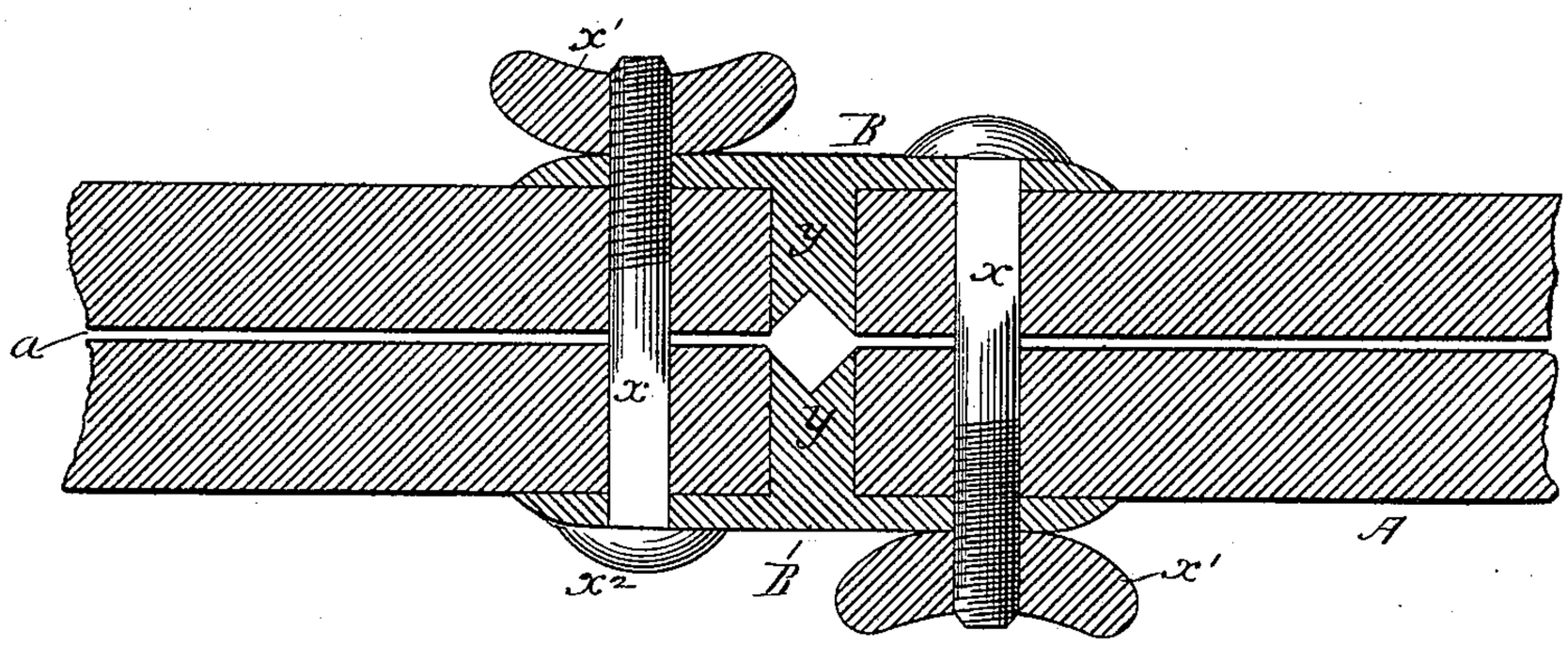

Fig. 2.

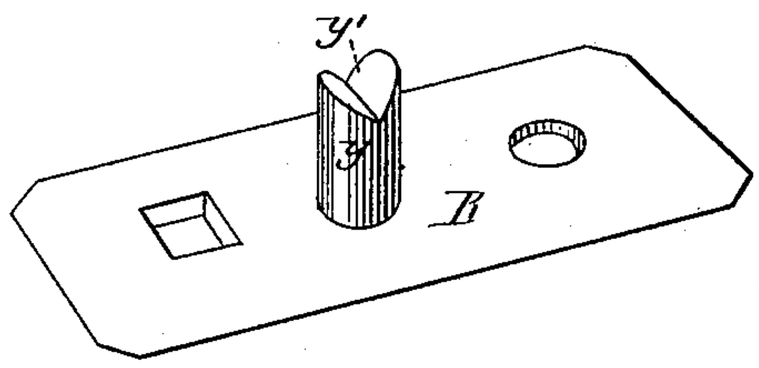

Fig. 3.

WITNESSES.
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UNITED STATES PATENT OFFICE.

OBED PECK, OF ROWE, MASSACHUSETTS.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 379,877, dated March 20, 1888.

Application filed October 3, 1887. Serial No. 251,297. (No model.)

To all whom it may concern:

Be it known that I, OBED PECK, of Rowe, in the county of Franklin and State of Massachusetts, have invented a certain new and useful Improvement in Handles, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to an improvement in handles for boring-bits, augers, and similar articles by which the said handle is detachably secured to the shank of the bit or other article and is firmly held and the usual wear of the socket in the handle is prevented.

In the drawings, Figure 1 is a perspective view. Fig. 2 is a plan view in section in which the operative parts of my invention are represented. Fig. 3 is a perspective view of the clamp and bar used in my device.

Like letters of reference indicate corresponding parts.

In the drawings, A represents the handle proper.

B represents a clamping-plate to which is rigidly attached the bar *y*. The said clamping-bar *y* is formed with a beveling V-shaped notch in the end, (represented by *y'*.) A socket, *b*, is formed in the center of the handle A, as shown in Fig. 1, and extending lengthwise of the handle upon each side of the socket *b* is made a longitudinal slot, *a a*. My device is also provided with two bolts, *x x*, each having, preferably, upon one end the head x^2, and upon the other and opposite end a screw-thread, to which is fitted a screw-nut, *x'*. The bolts *x x* pass through the holes made in the clamping-plates B, and also through the handle A, one upon each side of the socket *b*.

I am aware that handles have been made having a socket and longitudinal slot, the said parts being drawn together by a bolt or similar device; but in all of these and similar contrivances known to me there has been no means of preventing the strain and wear of the socket, neither has there been any device for re-enforcing the wood socket by metal, nor to combine the wood and metal socket in such a manner as that both shall be operative and both adjustable to all sizes of shanks. The defects heretofore mentioned, well known to mechanics who use this class of articles, I entirely overcome by my present invention.

It is apparent that a wooden socket will quickly become worn in use, so that the clamping-power of the socket is materially reduced or destroyed, while the consequent strain upon the handle itself is increased. It is of the utmost importance to prevent this wear and strain by some metal re-enforcement of the socket, without materially cutting away or weakening the handle, more especially the parts of the handle near and contiguous to the socket. This I accomplish by the clamping-plate B, to which is secured the clamping-bar *y*. I preferably use two of these clamping-plates, each provided with its clamping-bar suitably formed at its outer extremity to correspond with the shape and bevel of the wood socket of the handle, into and through which the shank of the auger or bit is to pass. A mortise is formed from the outside of the handle into the central socket upon opposite sides of the handle, through which the bars *y y* pass.

It is obvious that when the clamping-bars *y* of the clamping-plate B are adjusted upon each side of the handle the ends of the bars *y*, formed and beveled to correspond with the size and shape of the socket and while unscrewed or resting in their normal condition, the ends of the bars *y* coinciding with the outer sides of the socket *b*, form, in effect, a compound socket, consisting partly of wood and partly of metal, (the clamping devices and bars being preferably formed of metal, although if the ends of the clamping-bars *y* were metal-capped they would be quite serviceable.) As the shank of the bit or auger must necessarily rest in the metal end of the clamping-bar *y*, it is impossible that there should be any perceptible strain or wear upon the sides of the wood socket in the handle. It will be observed, moreover, that the ends of the clamping-bars *y* always coincide with the sides of the wood socket of the handle, being in this respect self-adjustable.

In operation the shank of the auger or bit is placed in the socket *b* of the handle, two of the diagonal corners of the shank resting in the centers of the beveled V-shaped ends *y'*, formed in the end of the clamping-bars *y*. As the screw-nuts *x'* are turned down upon the bolts *x x*, the sides of the socket and also the ends of the clamping-bars *y* are simultaneously

compressed upon either side of the bit-shank, securely holding the same.

It is manifest that whatever the sides of the socket or whatever the size of the auger or bit shank to be held, the several parts, when constructed as described, will always act in securing the handle to the shank of the auger or bit in the same efficient manner, as hereinbefore indicated.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The handle A, formed with the slots *a a* and the central socket, *b*, between and communicating with said slots, the clamping-plates B B, each provided with a central bar, *y*, projecting inwardly to the said socket *b*, and the bolts *x x*, provided with nuts *x' x'*, all combined and adapted substantially as and for the purposes described.

2. In a handle formed with a socket and side mortise, the side clamp, B, provided with a central bar, *y*, integral therewith, said bar formed at its inner end with the V-shaped notch *y'* and adapted to press against the bit-shank near the center of the socket when said shank is introduced therein, substantially as and for the purposes described.

3. In combination with the handle A, provided with the socket *b* and having suitable openings at right angles and into the said socket, the bars *y y*, formed to correspond to the size and shape of said openings and arranged to be adjustable therein, the ends of said bars adapted to conjointly press upon the opposite sides of a bit-shank placed in the handle-socket, all substantially as and for the purposes described.

4. In a handle formed with a wood socket made centrally in said handle, the opposite sides of said handle forming the sides of the socket and adjustable, a metal adjustable clamping-socket formed by the ends of bars *y* and extending inwardly and centrally and at right angles to said wood socket, and the parts forming both the wood and the metal sockets adapted to simultaneously grasp and hold bit-shanks of varying sizes placed therein, all combined substantially as and for the purposes set forth.

5. In a handle formed with a shank-socket, the combination of two clamping-plates, each provided with a bar integral therewith and extending inwardly from each side and at a right angle to the shank-socket, each centrally of the handle and of said shank-socket, the inner ends of said bars adapted to clamp the bit-shank upon opposite sides and to center said shank in the operation of clamping, and clamping-bolts, the said bar arranged to be forced inwardly by said clamping-bolts applied to the clamping-plates and extending through the handle, substantially as and for the purposes specified.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 29th day of September, A. D. 1887.

OBED PECK.

Witnesses:
A. C. THOMPSON,
BOWDOIN S. PARKER.