

JOHN JOHNSON.

Improvement in Devices for Securing Punches to their Stocks.

No. 125,302.

Patented April 2, 1872.

Fig. 1

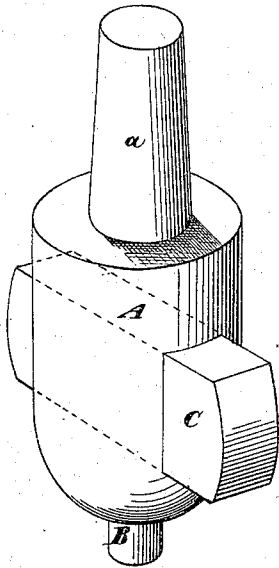
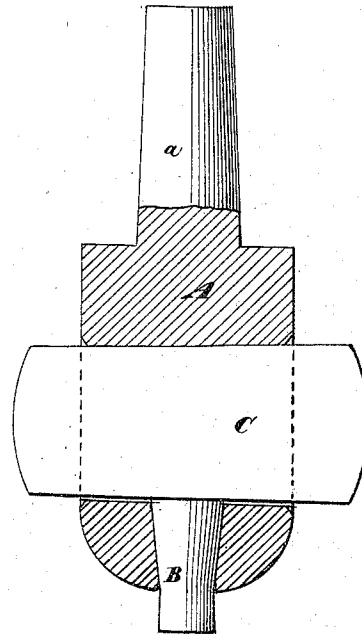


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN DEVICES FOR SECURING PUNCHES TO THEIR STOCKS.

Specification forming part of Letters Patent No. 125,302, dated April 2, 1872.

Specification describing an Improved Mode of Securing Punches to their Stocks or Holders, invented by JOHN JOHNSON, of the city, county, and State of New York.

This invention relates to punches for punching the rivet-holes in boiler-plates and for other purposes. Heretofore the punches in such machines have been ordinarily secured in their stocks or holders simply by friction, and to obtain sufficient surface therefor have been of considerable length to enter correspondingly long sockets. Forging them to fit the sockets in their stocks or holders is a very delicate operation, and one requiring considerable time, and when once fitted it is a difficult matter to detach them. The object of this invention is to reduce the labor of manufacturing the punches, to facilitate their attachment to their stocks and detachment therefrom; also, to render their attachment positive; likewise, by reducing the length of the punch, to economize the amount of steel used. To this end it consists in the combination, with a stock or holder transversely slotted above the punch-socket, of a punch capable of being inserted through the stop of the holder into its socket, said punch having its upper portion swelled or enlarged to prevent it from dropping through the socket, and a key which fits said slot and bears on the top of the punch and retains it in place.

In the accompanying drawing, Figure 1 is a perspective view of a punch stock or holder and attached punch constructed according to my invention, and Fig. 2 is a central section of the same.

Similar letters of reference indicate corresponding parts in both figures.

A is the stock or holder in which the punch is secured. It is provided, as usual, with a shank, *a*, for its attachment to the press, and has a taper slot extending transversely through it, communicating with the under side of which is the socket for the punch B. The upper part of this socket is flaring—or, in other words, tapered from the top downward. The punch B is of such length as to permit of its being inserted into its socket in the stock through the slot therein. C is the key which fits within the slot and secures the punch therein.

The punch is first inserted through the slot in the stock into the socket provided for its reception, and is prevented from slipping through by means of its tapered or swelled upper portion fitting the flaring portion of the socket. The key C is then inserted in the slot and driven in tight, and by bearing on the top of the punch it secures it in place, and that in a positive and rigid manner. To detach the punch it is only necessary to remove the key, and the punch may then be readily taken out by the hand.

Claim.

The combination, with the socketed and transversely-slotted stock or holder A, of the punch B having an enlarged upper portion, and the key C, substantially as and for the purpose herein set forth.

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Witnesses:

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