(No Model.)

P. SNITZEL.

RIVET EXTRACTOR.

No. 380,703. Patented Apr. 10, 1888.

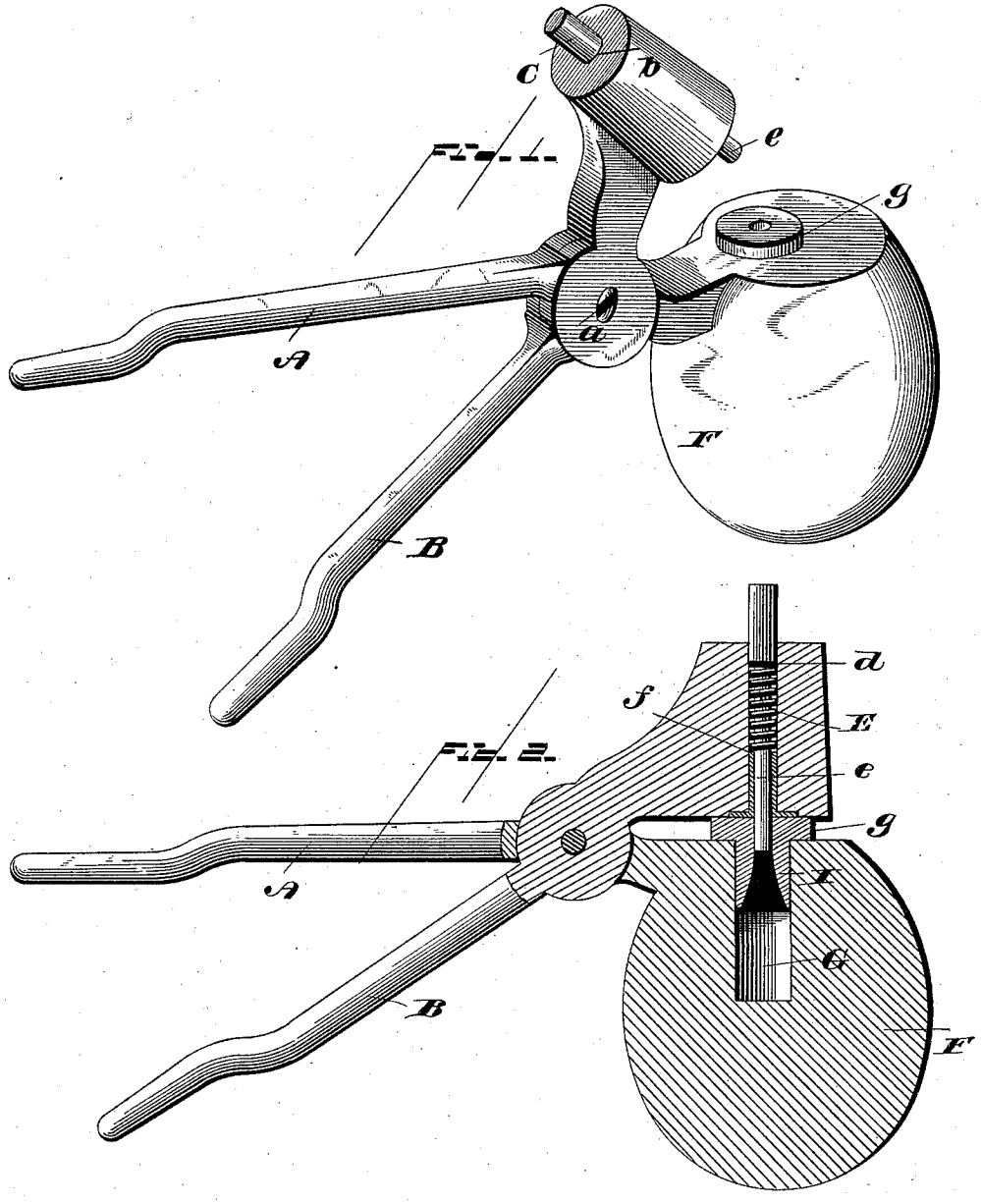


Fig. 1.

Fig. 2.

WITNESSES

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PHILIP SNITZEL, OF HARMONY, PENNSYLVANIA.

RIVET-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 380,703, dated April 10, 1888.

Application filed October 22, 1887. Serial No. 253,079. (No model.)

To all whom it may concern:

Be it known that I, PHILIP SNITZEL, a citizen of the United States, residing at Harmony, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Rivet-Extractors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention is designed for the purpose of extracting rivets from cutter-bars of harvesters in removing and replacing cutter-teeth; and a further object of the invention is to provide a cheap and simple means for punching holes in sheet metal, such as hoop-iron and the like.

The invention will be fully understood from the following description and claims, when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of my improved device in a position to receive a piece of sheet metal and punch the same; and Fig. 2 is a side elevation of the same, with the main parts in section.

In the said drawings, A and B indicate two hand-levers, which are hinged together, as shown at *a*. The adjacent sides of these levers, beyond the hinge or pivotal point *a*, are flat or plain, and are designed to receive between them a cutter-bar or like device, as will be presently explained. The forward end of the lever A is provided with a central vertical aperture, *b*, for the reception of a metallic punch, C, having an annular shoulder, *d*, formed by a reduced portion, *e*, around which latter is a spiral or coil spring, E. This spring has an upper bearing against the shoulder of the punch and a lower bearing upon a shoulder, *f*, in the aperture *b*, so as to keep the said punch normally raised, as shown. The forward end of the lever B terminates in an enlargement, F, of egg shape in outline, having its upper anvil-face flat, and provided with a cylindrical recess, G, which is designed to receive the punch after the impulse of the hammer, and also the displaced rivet from a cutter-bar. This recess is sufficiently deep to receive a rivet as it has been displaced; and in practice, when it is desirable to remove a tooth from the cutter-bar which has been broken or injured, it is only necessary to adjust the jaws of the implement upon the cutter-bar with the enlarged end F of the lever B bearing on the ground or other suitable support until the recess in the said lower jaw has been brought beneath the rivet to be removed and the punch above the same. A blow from a hammer or the like upon the punch will then force out the rivet and allow the tooth to be removed and replaced.

By having the forward end of the lower lever egg or ball shaped it is as readily adapted for a bearing upon a hillside as a plane surface, and by having it very stout it serves as an anvil or an excellent bearing for hammering upon. It may also be conveniently used as a hammer in many instances.

This implement will be found very efficient in punching sheet metal, which is often desirable with farmers and others, and in using it for such purpose I employ a reducer for the socket in the enlarged forward end of the lever B. This reduced portion I is designed to be placed in the recess of the said jaw, and has an annular external flange, *g*, at its upper end for sustaining the same, as shown more fully in Fig. 2 of the drawings. It will be seen that this reducer has a central vertical aperture, and that its flange *g* is sufficiently thick to allow the upper jaw to bear thereon when closed, so that the same will serve the additional function of holding a piece of sheet metal while a hole is being punched therein.

Having described this invention, what I claim is—

1. The punch described, comprising two hinged levers, one provided with a head axially perforated, as described, to receive a punch, and the other enlarged so as to be of great mass relatively to the other parts of the device, and having a recess to receive a die, substantially as specified.

2. The hand implement described, consisting, essentially, of the two hinged levers, one of which is provided at its forward end with an enlargement flattened on its upper side and recessed centrally, as at G, whereby it can receive the die, as described, and the opposite

lever having a central vertical aperture in its forward end, a socket, *f*, therein, and a punch having an annular shoulder, and a spring surrounding the punch between the shoulder and the said socket, and means for retaining the spring in position, substantially as shown and described.

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

PHILIP SNITZEL.

Witnesses:
PETER NESBITT,
F. R. COVERT.