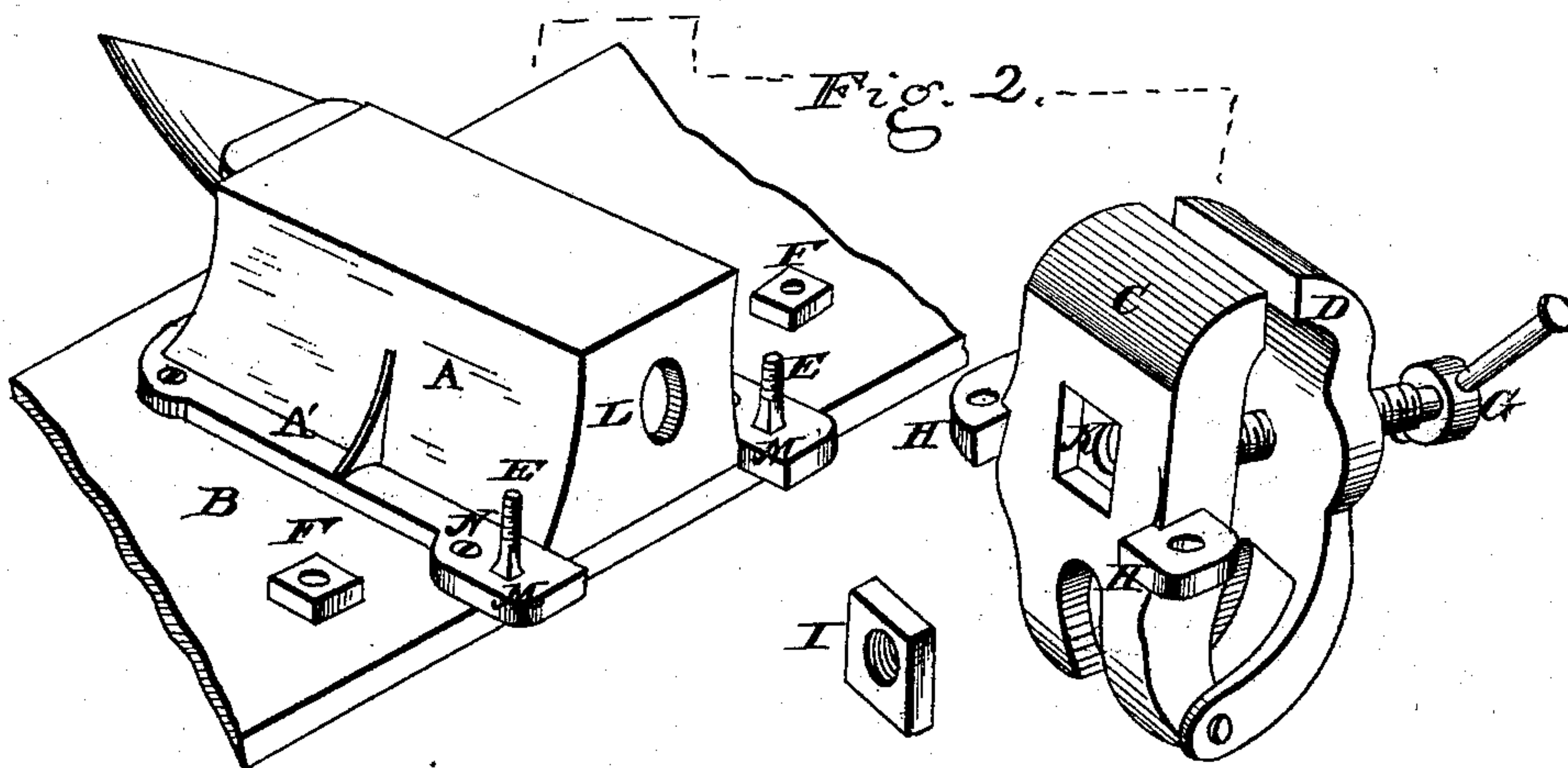
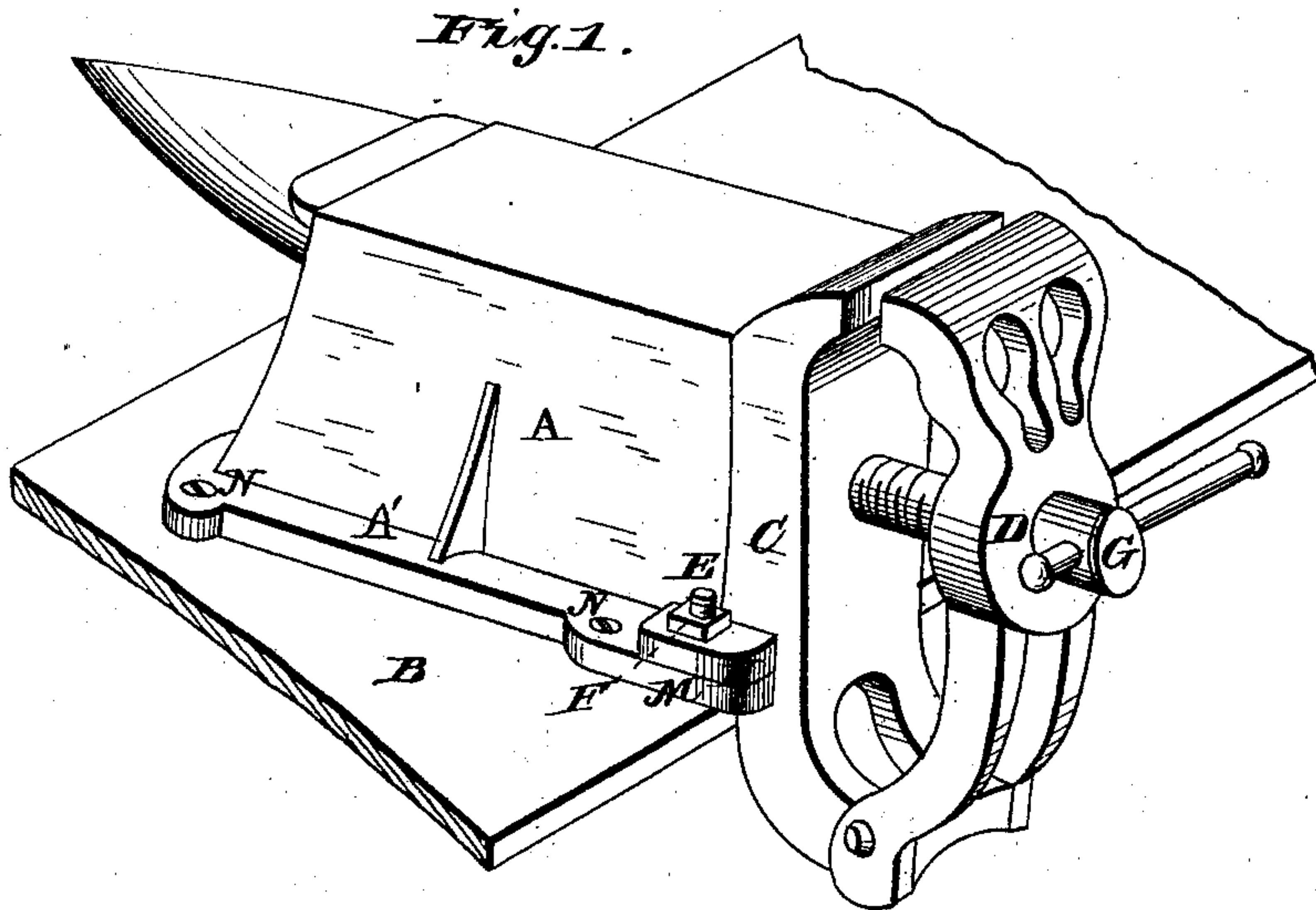


E. E. LEACH.  
Combined Anvil and Vise.

No. 203,167.

Patented April 30, 1878.



WITNESSES  
 Frank L. Conrad  
 P. Mc Nicker.

By

INVENTOR  
Edwin F. Leach.  
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Attorney

*Attorney*

# UNITED STATES PATENT OFFICE.

EDWIN E. LEACH, OF CEDAR RAPIDS, IOWA.

## IMPROVEMENT IN COMBINED ANVIL AND VISE.

Specification forming part of Letters Patent No. **203,167**, dated April 30, 1878; application filed March 2, 1878.

*To all whom it may concern:*

Be it known that I, EDWIN E. LEACH, of Cedar Rapids, Linn county, and State of Iowa, have invented certain new and useful Improvements in Combined Anvil and Vise, of which the following is a specification:

My object is to improve the manner of connecting the vise to the anvil, so that it can readily be detached without removing the anvil from its bench or block; and also to fit the nut of the vise-screw to the vise-jaw in such a way that it will not drop out of place as the screw is withdrawn, thus rendering it easy to replace the same by simply turning it inwardly, the mode of effecting which result is more particularly described hereinafter.

In the accompanying sheet of drawings, Figure 1 represents a perspective view of my invention with the vise and anvil connected. Fig. 2 is a similar view of the same separated.

A represents the anvil, conforming in general outline to the ordinary blacksmith's anvil. It is provided at its lower edges with flanges A', by which it is fastened to the bench or block. The end of the anvil to which the vise is attached has a surface, plane or otherwise, to correspond to the back of vise-jaw C. A portion of the flanges M extend beyond this bearing-surface, and lap similar lugs H on vise-jaw C. The bolts E E pass through proper holes in both flanges and lugs, and the parts are drawn snugly and rigidly together by nuts F F, as represented in Fig. 1.

By placing the anvil a little back from the edge of the bench or block, and inserting the bolts E E through the flanges M M from below, the bolts are retained in place at all times by the subjacent wood.

To allow for the necessary raising of the vise, and admit of its removal without turning out the screw G, the hole L in the end of the anvil is made vertically elongated. By this improvement the vise may be raised sufficiently to allow the lugs H H to pass the ends of bolts

E E, when it is drawn directly away from the anvil.

To further facilitate the separation of vise and anvil, and to prevent the vise-nut I from dropping out of its place, and thereby causing inconvenience in replacing the screw when, by accident or design, it may have been removed, a socket, K, is formed in the back of vise-jaw C, into which the vise-nut is placed, and held in position by the vise-screw and the end of the anvil A.

In vises heretofore constructed for this purpose the nut has been put inside the anvil; hence, when it became necessary to remove the vise, or when, by accident or purposely, the screw was withdrawn, the nut, not being properly kept in place, dropped down, and the anvil required to be detached from the bench or block to start the nut upon the screw in re-connecting. My invention entirely obviates all difficulty of this kind, as the nut is always in place, whether vise and anvil are connected or not.

I do not claim, generally, the combination of a vise with an anvil, the idea being old.

What I do claim as new, and desire to secure by Letters Patent, is—

1. The anvil A, having hole L, and flanges M extending beyond the rear bearing-surface of the anvil and carrying screws E, combined with vise C D, having lugs H and screw G, substantially as and for the purposes set forth.

2. The combination of vise-jaw C, having socket K, with vise-screw G, nut I, and anvil A, having hole L, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own, witness my hand this 23d day of February, A. D. 1878.

EDWIN E. LEACH.

Attest:

J. W. SHEARER,  
J. M. ST. JOHN.