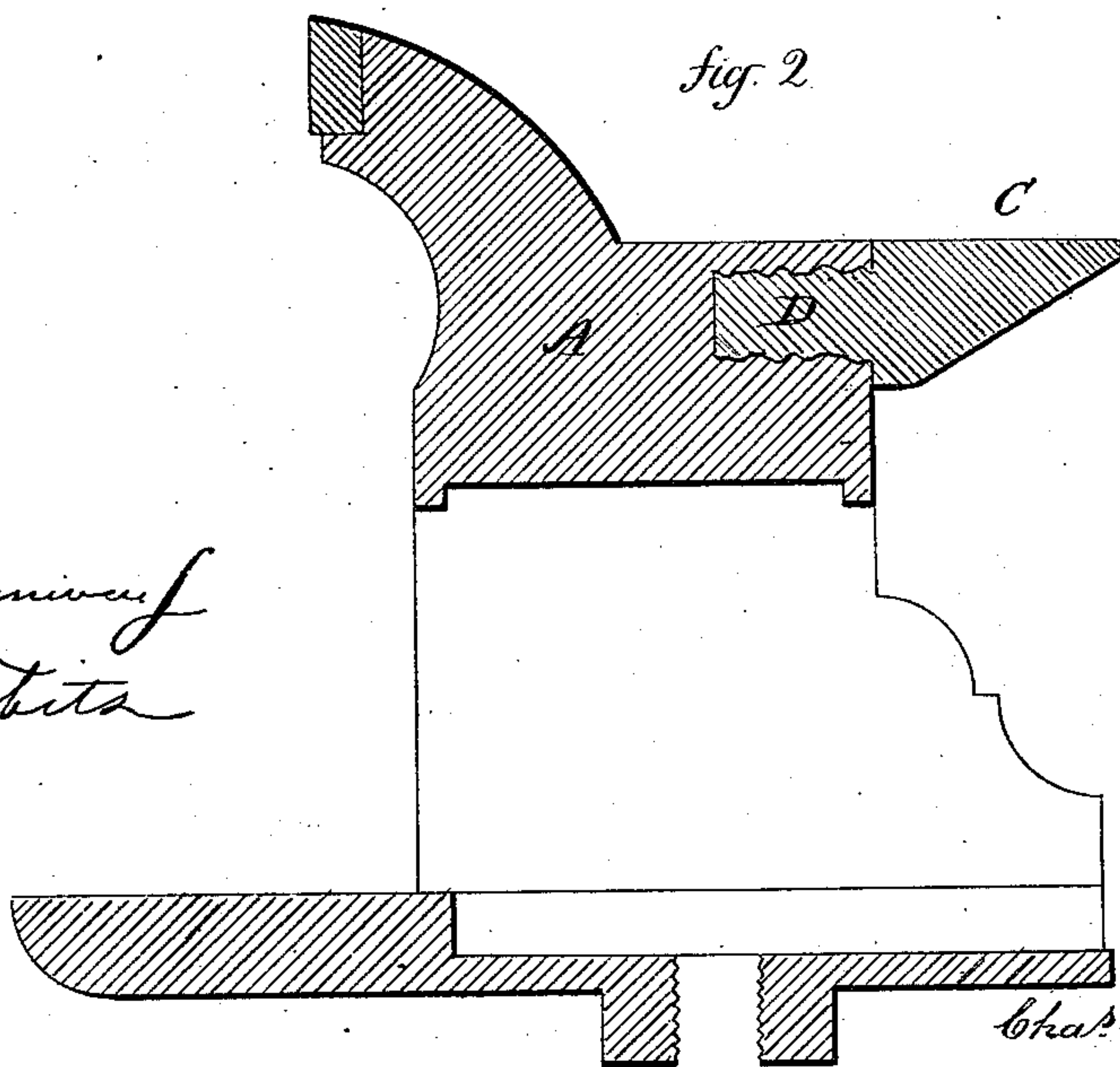
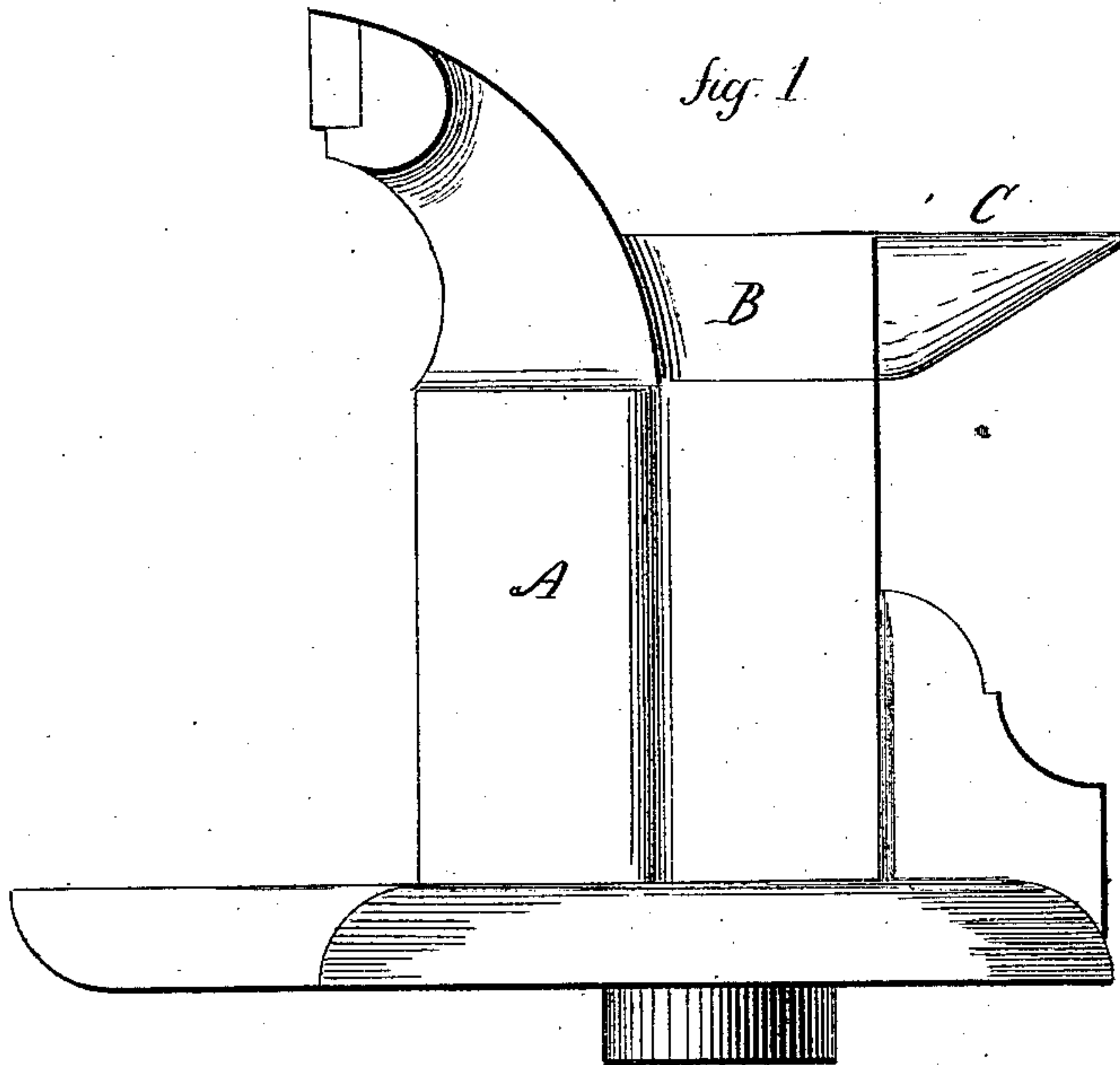


C. L. KINGSLEY.  
Vise.

No. 161,241.

Patented March 23, 1875.



Witnesses.

J. H. Shumway  
A. J. Tobita

Chas. L. Kingsley  
Inventor

By Atty.

John O. Earle

# UNITED STATES PATENT OFFICE.

CHARLES L. KINGSLEY, OF MERIDEN, CONNECTICUT, ASSIGNOR TO  
CHARLES PARKER, OF SAME PLACE.

## IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. **161,241**, dated March 23, 1875; application filed  
September 24, 1873.

*To all whom it may concern:*

Be it known that I, CHARLES L. KINGSLEY, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Vises; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view, and in Fig. 2, a longitudinal central section.

This invention relates to an improvement in that class of metal vises which have an anvil formed on the stationary portion.

It has been the usual practice to make the anvil and horn of steel, and secure it to the vise by screws or similar means, it being impracticable to cast the horn as a part of the vise; that must necessarily be made from steel.

The object of this invention is to avoid the usual means of attachment, and at the same time apply a steel horn to the anvil; and the invention consists in casting the anvil with the other portion of the vise upon which the anvil is required, and inserting in the flask, prior to casting, a steel or similar metal horn, a portion of which extends into the mold for the anvil, so that the metal which forms the anvil will flow around, and, cooling, firmly hold the horn as a part of the anvil.

A is one portion of an ordinary iron vise; B, the anvil; C, the horn. The horn is preferably formed from steel, and made with a shank, D. The mold is made as if to cast the horn, and into that part of the mold the horn C is placed, the shank D extending into the anvil portion. The shank is preferably roughened or made uneven. The metal is poured into the mold in the usual manner, and flows around the shank D, firmly uniting the horn and anvil as if of one piece of metal.

By this construction a considerable amount of labor is avoided, and the vise produced equally as good as the usual construction.

I have represented the anvil and horn as attached to the stationary portion of the vise; but it will be understood that it may be applied in like manner to the movable portion.

I do not broadly claim forming an anvil of part cast and part wrought metal united by the process of casting, as such I know to be old.

I claim as my invention—

A cast-metal vise-jaw, having the anvil B formed thereon in one and the same piece with the jaw, and the wrought-metal horn C when attached to the anvil in the process of casting the jaw, substantially as described.

CHAS. L. KINGSLEY.

Witnesses:

JOHN PARKER,  
RALPH A. PALMER.