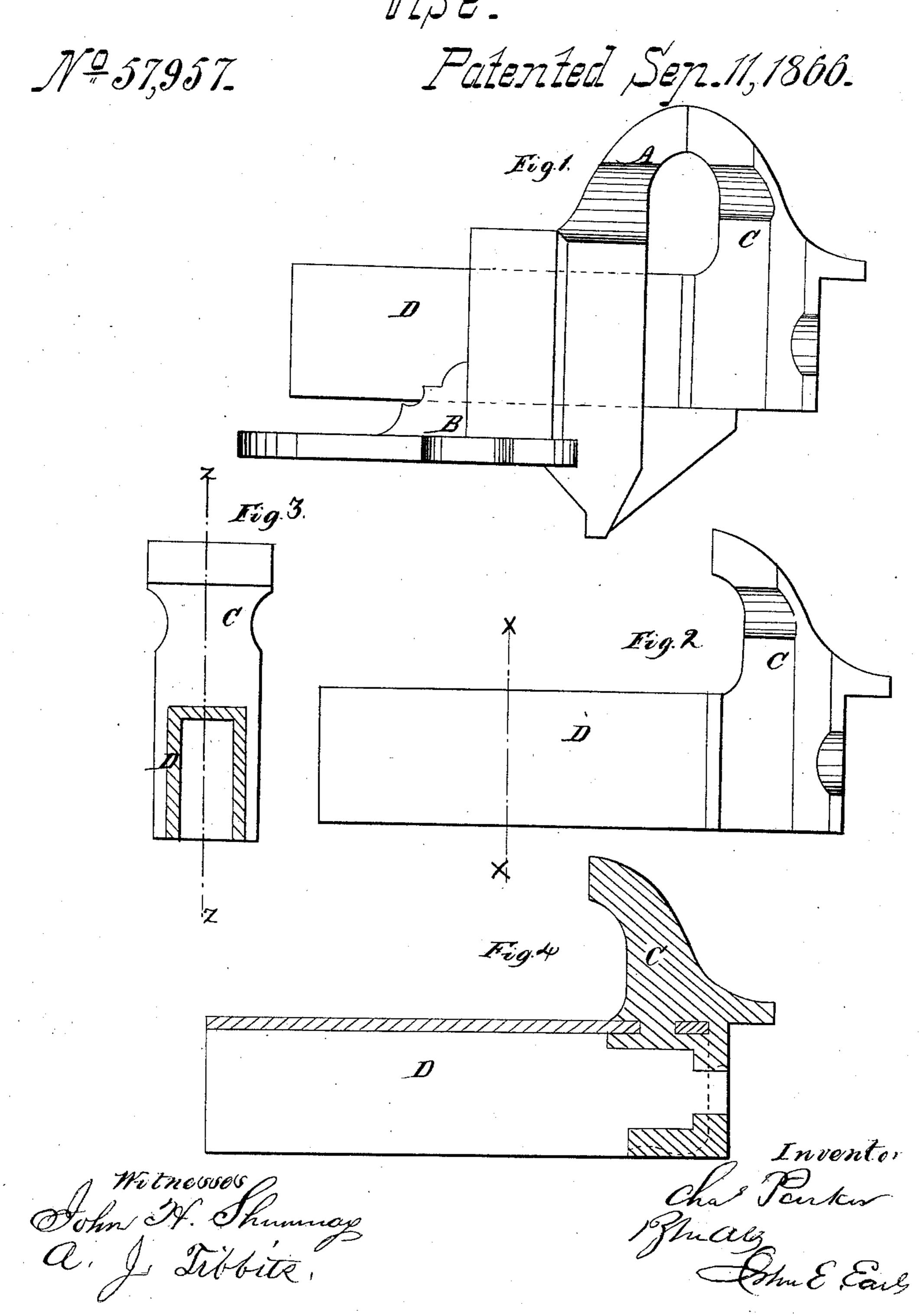
## CZZKEZ,

1/250



## UNITED STATES PATENT OFFICE

CHARLES PARKER, OF MERIDEN, CONNECTICUT.

## IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. 57,957, dated September 11, 1866.

To all whom it may concern:

Be it known that I, CHARLES PARKER, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Cast-Iron 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; Fig. 2, the movable jaw detached from the fixed jaw; Fig. 3, a section on lines x x; and in Fig. 4 a longitudinal

section through lines zz, Fig. 3.

My invention relates to an improvement in the construction of that class of vises for an improvement in which Letters Patent were granted to me June 30, 1854; and it consists in constructing the tail or guide-bar entirely of wrought metal, and casting the movable jaw thereon, whereby the weight of the vise is much reduced and its strength greatly increased.

In the use of vises of this class a great difficulty has been experienced from breakage of the guide-bar, to overcome which was the object of my invention, patented as aforesaid. That partially overcame the difficulty. The present invention entirely overcomes it; and in order that others may be enabled to construct my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is the fixed jaw; B, the plate upon which the jaw A is fixed; C, the movable jaw, which is fixed to the guide-bar D, the said guide-bar passing through the body of the fixed jaw A. These parts, in their general form and appearance, are the same as in vises heretofore constructed.

The screw which operates the movable jaw is applied in the usual manner, and is inclosed within the guide-bar. This is so well known that it is not necessary to complicate the drawings by its illustration.

Heretofore the guide-bar has been cast with its movable jaws strengthened by bars, as seen in my patent aforesaid, the objections to which are hereinbefore mentioned. To overcome these objections I form the bar of wrought-iron, as seen in section, Fig. 3, of proper length. At the end to which the jaw C is to be cast upon I cut through the bar, as seen in Fig. 4, and form the lower edges irregular, as denoted in broken lines, Fig. 4. Thus prepared, the bar is placed in molds prepared for the purpose, and the jaw C cast thereon. The irregular form of the bar at that end and the opening through the top permit the metal to flow in and around the bar, so as to be united thereto in the strongest possible manner. The jaw and bar thus formed are afterward fitted to the fixed jaw in the usual manner.

By this construction the bar is made much lighter, and is, from the nature of the metal, very much stronger than the cast bar heretofore constructed, and at no increased cost of

manufacture.

Having therefore thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

The wrought-metal bar D, in combination with the cast-metal jaw C, when constructed and united substantially in the manner and for the purpose specified.

CHAS. PARKER.

Witnesses:
John W. Miles,
Almeron Miles.