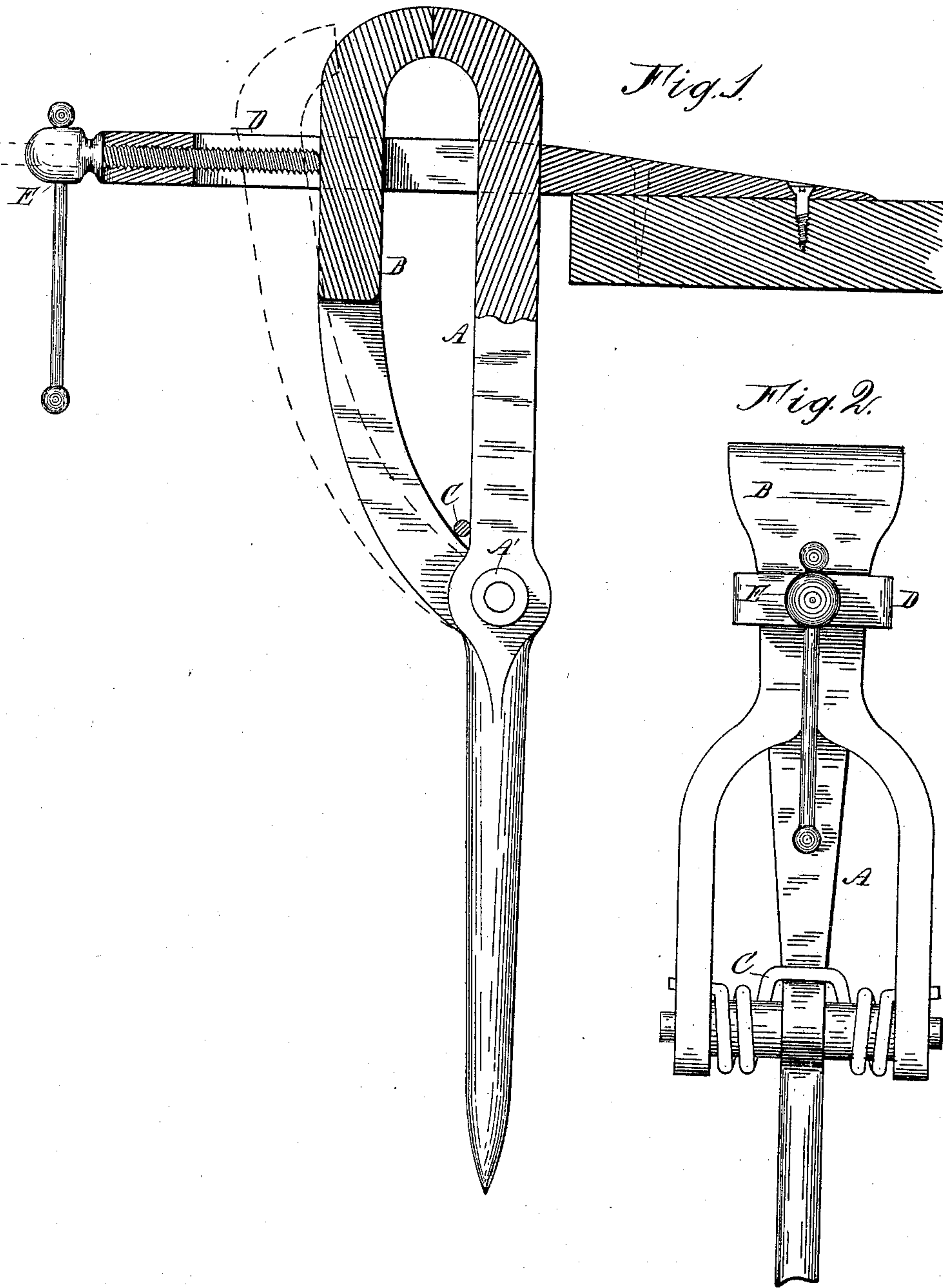


(No Model.)

W. BRADBROOK.
VISE.

No. 466,859.

Patented Jan. 12, 1892.



Attest.

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Inventor,

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UNITED STATES PATENT OFFICE.

WALTER BRADBROOK, OF DYSART, IOWA.

WISE.

SPECIFICATION forming part of Letters Patent No. 466,859, dated January 12, 1892.

Application filed September 14, 1891. Serial No. 405,607. (No model.)

To all whom it may concern:

Be it known that I, WALTER BRADBROOK, a citizen of the United States, residing at Dysart, in the county of Tama and State of Iowa, have invented certain new and useful Improvements in Vises; and I do hereby 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.

The object of my invention is to so construct a vise as to leave the whole space between the jaws open to the floor for greater convenience in use and the better preservation of the screw.

The invention consists in the construction, combination, and arrangement of parts, as hereinafter fully set forth and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a central vertical section of a vise embodying my invention, as seen from the side; and Fig. 2 is a front elevation of the same.

Similar letters of reference indicate corresponding parts.

The vise represented is of the hinged-jaw type, a form of vise best adapted to the use of blacksmiths, and for other purposes where a strong grip is required. My invention is, however, equally well adapted to a parallel-jaw vise, as will be evident without illustrating its application thereto.

Referring now to the drawings, A represents the stationary jaw of the vise, which is usually secured to the bench by a stirrup, and seated at its lower end in a socket on the floor or in a bracket for that purpose, the mode of attachment being unimportant. The other jaw B is hinged to it at such an elevation as may be desired.

In practice I prefer to bifurcate the lower end of the jaw B, spreading the fork quite wide, as shown in Fig. 2, so that a bar of iron as wide as the jaw may be placed in the vise vertically, and pass unobstructedly to the floor, if desired. To this end, therefore, the pivot A' on the jaw A should extend to some distance each side of the jaw, as shown. On this pivot or stud is mounted a suitable

spring C, tending to spread the jaws apart in the usual way. Over the portion of the jaws which extend above the bench is placed a yoke D, having a screw E fitted in its outer end, and the other end adapted to be secured to a bench in the usual way. The opening in this yoke is slightly wider than the outer jaw, so as to permit it to swing freely therein, and long enough to allow it to swing as much as may be required.

In the drawings the yoke is represented as somewhat narrower than the gripping portion of the jaws, the jaws having a reduced neck, corresponding therein with the jaw in common use. In practice, however, the yoke may be made as wide as any portion of the jaw, and thus allow a bar of the same width to pass between them to the floor, as above mentioned. As will be seen, the screw acts on the outer jaw by pressing against it with its inner end, in the manner of a set-screw. The advantage of this construction is that it not only leaves the holding portion of the vise entirely open for the admission of work, but prevents the accumulation of filings on the screw, which, in vises of the common type, cut out and destroy the screw in a short time. It is to be further noted especially, that there is no weakening of the jaw in the formation of a screw-hole, and the vise may thus be made very strong of comparatively light material.

Having thus fully described my invention, I claim—

1. In a vise, the combination, with stationary and movable jaws, substantially as described, of a yoke, inclosing said jaws near their upper ends, the opening in the yoke being long and wide enough to permit the necessary movement of the movable jaw, and a screw fitted in the outer end of the yoke and adapted to bear with its inner end on the outer face of the movable jaw.

2. In a vise, the combination of the stationary jaw A, having the pivot or stud A', the jaw B, bifurcated at its lower end, and engaging thereby with said stud, and the yoke D, having the screw E therein, substantially as and for the purpose set forth.

3. In a vise, the combination of the jaw A,
having the stud A', the jaw B, connecting
by its bifurcated lower end with said stud,
the spring C, adapted to press the movable
5 jaw outwardly, and the yoke D, having screw
E, substantially as and for the purpose set
forth.

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

WALTER BRADBROOK.

Witnesses

S. W. BRAINERD,
C. F. CLARK.