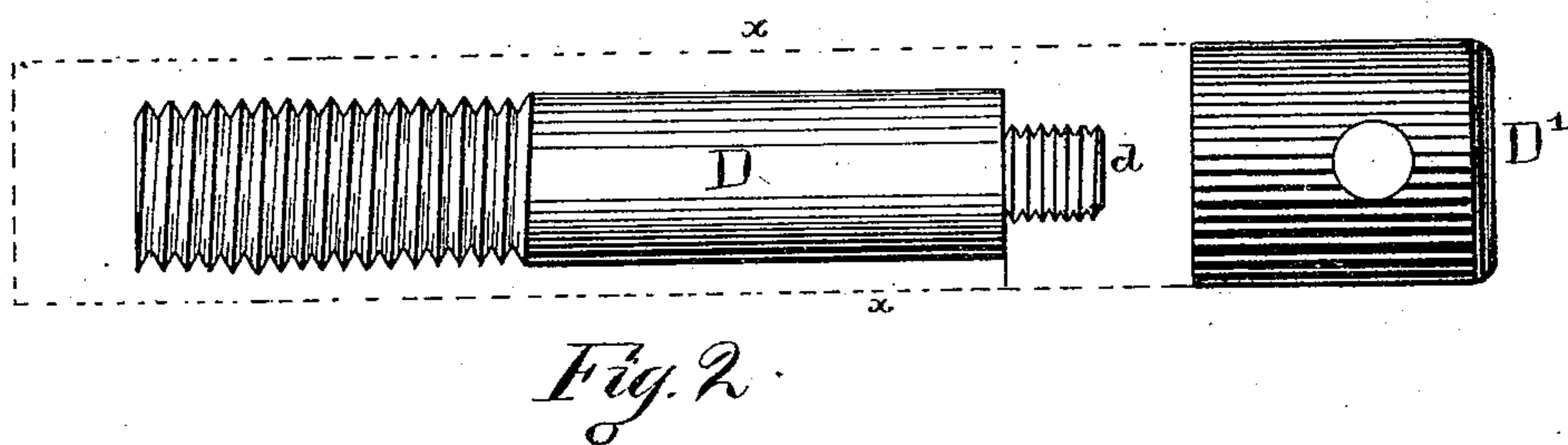
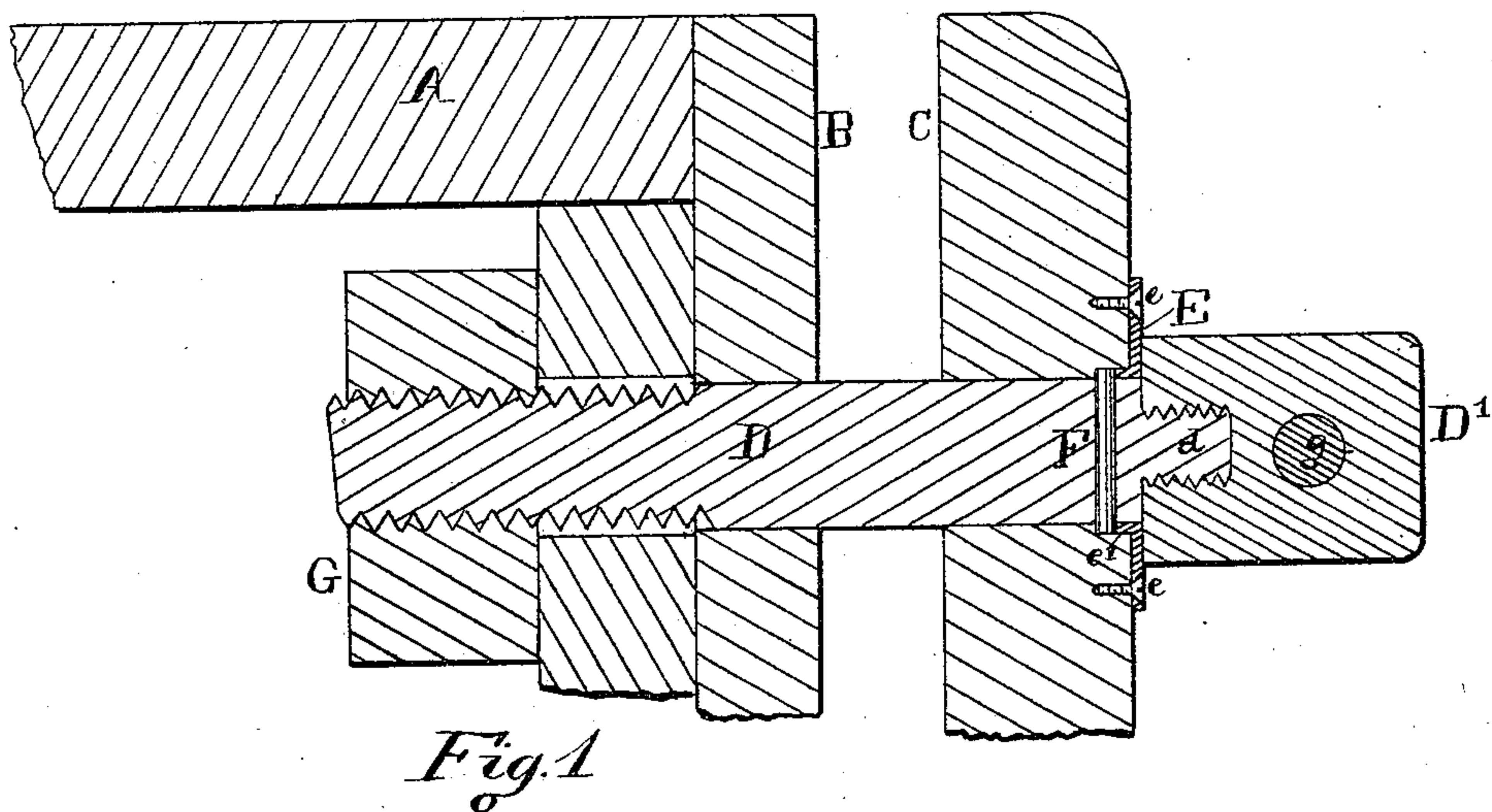


(No Model.)

J. F. MILLER.
CARPENTER'S VISE.

No. 304,220.

Patented Aug. 26, 1884.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN F. MILLER, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO WALTER E. HAGUE, OF SAME PLACE.

CARPENTER'S VISE.

SPECIFICATION forming part of Letters Patent No. 304,220, dated August 26, 1884.

Application filed May 27, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. MILLER, of
Pittsburg, in the county of Allegheny and
State of Pennsylvania, have invented certain
5 new and useful Improvements in Carpenters'
Vises; and I do hereby declare that the follow-
ing is a full, clear, and exact description of the
invention, which will enable others skilled in
the art to which it appertains to make and
10 use the same, reference being had to the ac-
companying drawings, which form a part of
this specification.

My invention has relation to carpenters'
vises, and has for its object the provision of a
15 novel means for securing the wooden screw in
place upon the jaw of the vise.

My invention consists in the novel construc-
tion, combination, and arrangement of parts
hereinafter described and claimed.

20 Referring to the accompanying drawings,
Figure 1 is a section of a portion of a work-
bench with my improvements in position
thereon; Fig. 2, a side view of the screw and
its head, the latter being detached from the
25 former.

A designates the top of the bench to which
the vise is attached; B, the face or immovable
jaw of the vise, and C the movable jaw of the
same.

30 D designates the screw, and D' the head of
said screw.

In the manufacture of wooden vise-screws
it has been customary heretofore to turn the
screw and its head from a single block, as in-
35 dicated by the dotted lines in Fig. 2 of the
drawings, where the dotted lines *xx* show the
outline of the block from which the screw was
cut. It will be observed that in this operation
of cutting out the screw and its head from a
40 single block considerable time is lost in re-
ducing the body of the block to the size of
the screw. I propose to form the screw sepa-
rately from its head and to form a screw-hole
in the head, into which a smaller screw, *d*, on
45 the end of the large screw D works, the head
being glued or otherwise secured in position.
This construction is of great advantage in the
combination with the metal bearing-plate, for

the reason that a very large head may be eco-
nomically employed, giving a correspondingly 50
large bearing-surface on the plate without the
necessity of cutting the screw out of a block
of the same size as the block from which the
head is formed.

E designates the plate, which is fastened to 55
the face of the movable jaw of the vise by
screws *e e*, and is provided with a central
opening for the passage of the screw, and an
annular flange, *e'*, surrounding the said central
60 opening.

F designates a pin which passes through the
screw D just behind the flange *e'* and serves to
retain the screw D in position in the plate E.
The movable jaw of the vise is countersunk
at its face, so as to receive the flange of plate 65
E and to give room for the pin F, which re-
volves with the screw. A nut, G, of the ordi-
nary construction, receives the end of the
screw D, which is provided with the usual le-
ver, *g*, by which it is turned into and out of 70
said nut.

The operation of my invention is as follows:
The head being secured in position upon the
screw by gluing or otherwise, the plate E is
slipped up over the shank of the screw until 75
it is in contact with the head. The pin F is
then inserted back of the flange *e'* of plate E,
which is thereby secured to the screw, while
allowing the latter to revolve freely therein.
The screw is now passed into the hole in the 80
movable jaw and screwed into the nut G. The
plate E is then securely fastened on the face
of the movable jaw, and the vise is ready for
operation.

Having described my invention, I claim— 85

1. The combination of wood screw D, hav-
ing a head, D', plate E, made in one piece and
provided with a central opening for the pas-
sage of said screw, and pin F, passing through
said screw behind said plate, substantially as 90
and for the purpose described.

2. The combination, with screw D, solid
plate E, having a central opening for the pas-
sage of said screw, and an annular flange, *e'*,
and pin F, for securing said plate in position 95
on the screw, of vise-jaw C, bored for the re-

ception of said screw and countersunk for the reception of the flange *e'* and pin F, substantially as described.

3. The combination of screw D, having the
5 solid plate E, secured thereon by a pin, F, and a removable head, D', constructed and arranged substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOHN F. MILLER.

Witnesses:

JOS. B. CONNOLLY,
ALVA A. MOORE.