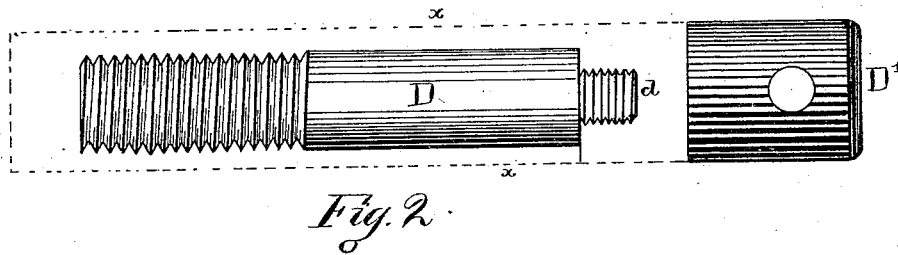
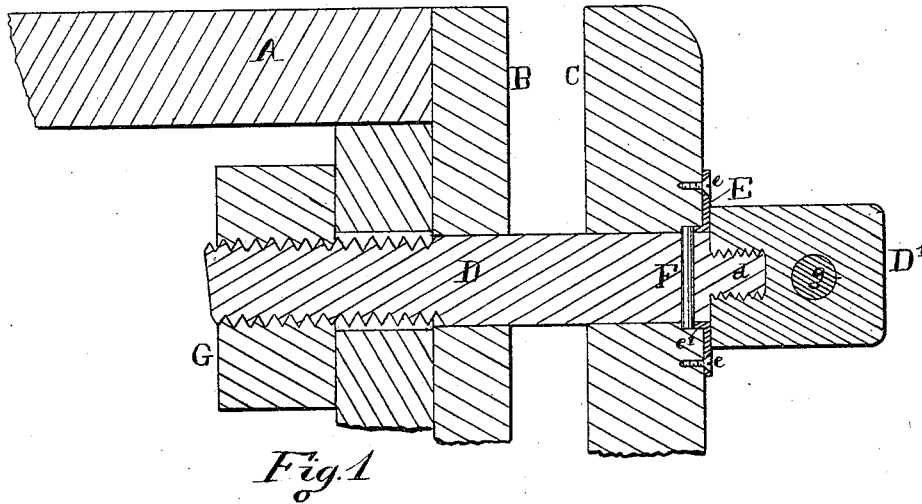


(No Model.)

J. F. MILLER.  
CARPENTER'S VISE.

No. 304,220.

Patented Aug. 26, 1884.



Witnesses

Alva A. Moore

Wm. Musser

Inventor

John F. Miller

by Connolly Bros. & McElroy

Attorneys

# 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 *x x* 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  
opening.

60 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-  
70 ver, *g*, by which it is turned into and out of  
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.