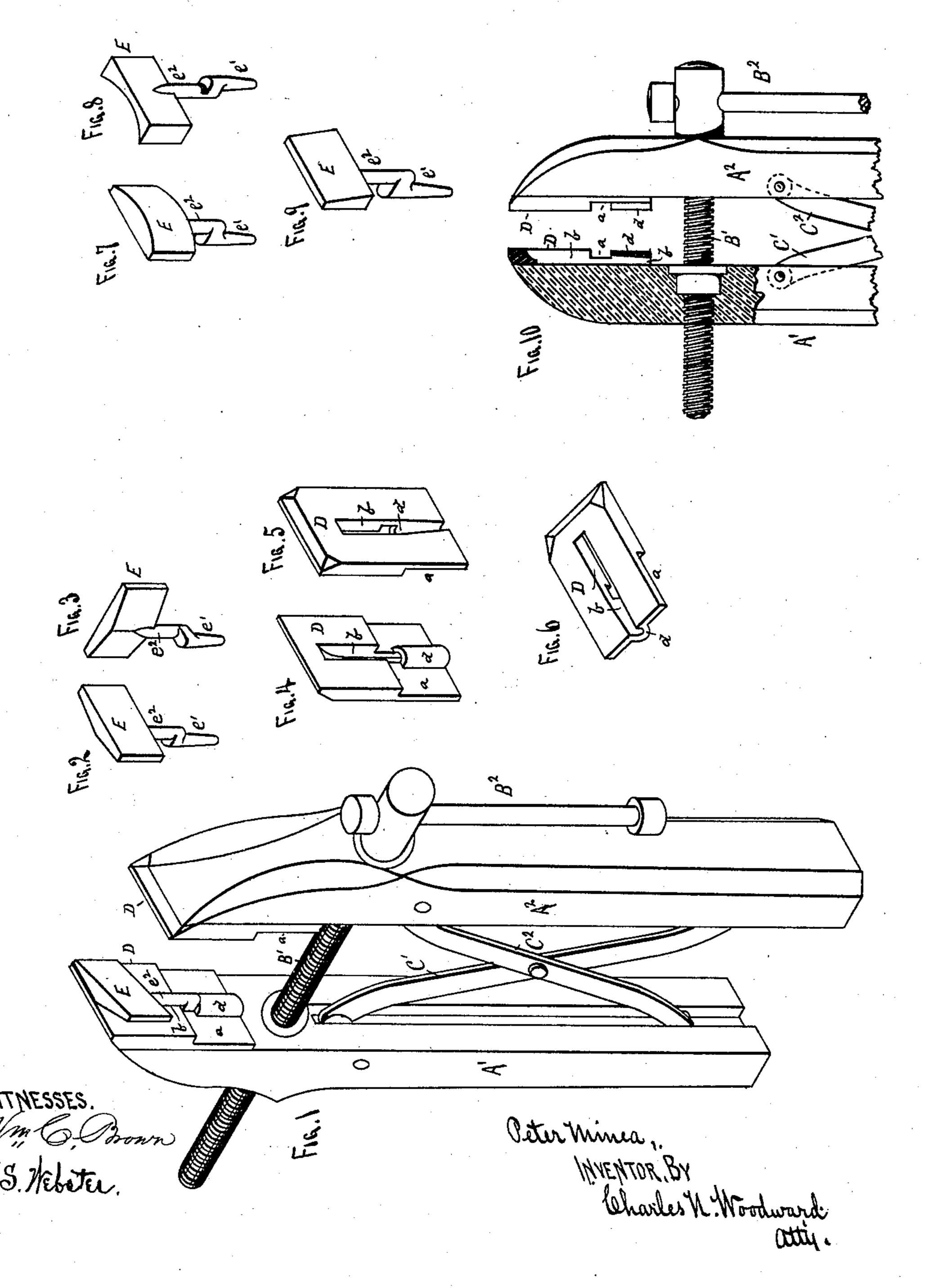
P. MINEA.

VISE.

No. 321,995.

Patented July 14, 1885.



United States Patent Office.

PETER MINEA, OF ST. PAUL, MINNESOTA.

VISE.

SPECIFICATION forming part of Letters Patent No. 321,995, dated July 14, 1885.

Application filed March 3, 1885. (No model.)

To all whom it may concern:

Be it known that I, Peter Minea, a citizen of the United States, and a resident of St. Paul, in the county of Ramsey, and in the 5 State of Minnesota, have invented certain new and useful Improvements in Vises, of which the following is a specification.

Figure 1 is a perspective view of the vise complete. Fig. 2 is a perspective front view, ro and Fig. 3 is a perspective rear view, of one of the removable jaws detached. Fig. 4 is a perspective front view, and Figs. 5 and 6 are perspective rear views, of one of the "cheekplates," Fig. 4 showing the construction of 15 the face of the plate, Fig. 5 showing the construction of the rear of the plate viewed from above, and Fig. 6 showing the construction of the plate viewed from below at the rear. Figs. 7, 8, and 9 are detached perspective 20 views of the removable jaws, showing the various forms in which they will be constructed. Fig. 10 is a sectional side view of the upper parts of the vise without the removable jaws.

A' A² are the two main jaws of the vise, 25 having the usual screw, B', hand-lever B2, and parallel cross-bars C'C2, in the ordinary manner.

Attached to the inner face of the upper part of each of the jaws A' A2 are metal 30 cheek-plates D, with their upper parts projecting over their lower parts, as shown, leaving recesses or depressions a in each. A slot, b, is formed through each cheek-plate, as shown in Figs. 4, 5, and 6, and the faces of 35 the slots within the depressed parts a are covered with curved hoods d, the slots and hoods thus forming sockets adapted to receive the tapering points e' of the legs e^2 of auxiliary jaws or cheek-plate E.

By this means the auxiliary jaws may be inserted or removed at pleasure by merely lift-

ing them upward.

The legs e^2 are shown with offsets, so that the points e' may be inserted into the sock-45 ets at the backs of the depressions a, and with the rears of the jaws E resting against the faces of the cheek-plates D, so that when the vise is in use the pressure will be borne by the bodies of the auxiliary jaws resting 50 against the faces of the cheeks D, which in

turn rest against the main jaws of the vise, so that the pressure will in no case be borne

by the legs e^2 or points e'.

The depressions a in the cheek-plates D are a very important feature of my inven- 55 tion, as they enable me to support the auxiliary jaws, with the hoods d, in lines back of the upper parts of the faces of the cheeks D, so that when the auxiliary jaws are removed no part of the cheek-plates projects 60 beyond their upper parts, to enable the vise to be used as an ordinary vise when the auxiliary jaws are removed. This will be more clearly understood by reference to Fig. 10, which shows the vise with the auxiliary jaws 65 removed.

Each of the jaws A' A2 will be provided with one of the cheek-plates D, so that the auxiliary jaw may be attached to either cheek; or, if required, two of the auxiliary jaws 70 may be used, as shown in Figs. 7 and 8, which represent a concave jaw and a convex jaw adapted to hold curved pieces between them.

It is evident that any desired form of jaw 75 may be used, and in practice I intend to furnish with each set of cheek-plates D a series of auxiliary jaws adapted to the varied forms of the work to be held.

In Figs. 1, 2, and 3 the auxiliary jaw E is 80 formed with an angular back, and adapted to turn upon the leg e', so that the face of the jaw will adapt itself to the form of the work being held in the vise. This form of jaw will hold with an equal pressure all angles within 85 the radius of its movement.

In Fig. 9 an auxiliary jaw is shown, with the inclination at right angles to the inclination of the jaw shown in Figs. 1, 2, and 3.

This invention may be attached to nearly 90 every form of vise; but it will generally be used on the wooden vises used by carpenters, wagon-makers, pattern-makers, &c.

The invention may be applied to old vises, or attached to and sold with new vises, as pre- 95

ferred.

Having thus described my invention, what I claim as new is—

1. As a new article of manufacture, a vise cheek-plate, D, having a depressed portion, 100 •

•

 $. \hspace{1.5cm} . \hspace{1.5cm$

forth.

2. In a vise, cheek plate or plates D, hav-5 ing depressed portions a, slot b, and socket d, ing depressed portions a, slot b, and socket d, and adapted to be attached to the jaw or jaws of a vise, in combination with auxiliary jaw | Witnesses: or jaws E, having e^2 and pivotal point e', C. N. WOODWARD, substantially as set forth. H. S. WEBSTER.

a, slot b, and socket d, and adapted to sup- | In testimony whereof I have hereunto set to port an auxiliary jaw, E, substantially as set | my hand in the presence of two subscribing witnesses.