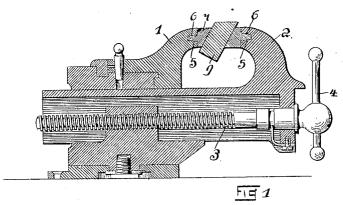
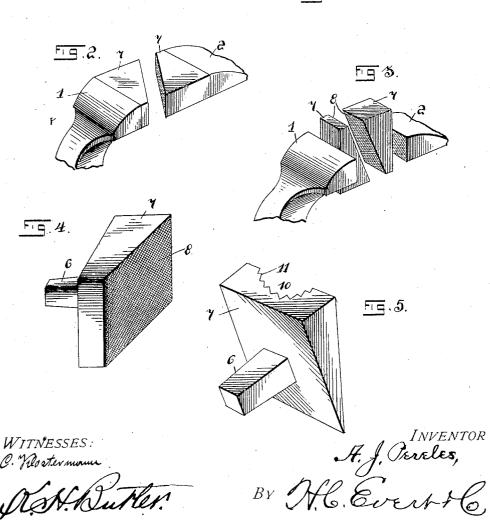
A. J. PERELES. VISE. APPLICATION FILED FEB. 16, 1907.





THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ABRAHAM JOSEPH PERELES, OF PITTSBURG, PENNSYLVANIA.

VISE.

No. 876,228.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed February 16, 1907. Serial No. 357,744.

To all whom it may concern:

Be it known that I, ABRAHAM JOSEPH Pereles, a citizen of the United States of America, residing at Pittsburg, in the county 5 of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Vises, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to removable and reversible supplemental vise jaws, adapted to be attached to the main jaws of a vise, and its object is to provide a vise with removable supplemental jaws capable of being reversed 15 or interchanged to grip a piece of work and secure it at different angles with relation to the confronting faces of the main jaws of the vise.

The construction of the improvement will 20 be fully described hereinafter in connection with the accompanying drawing which forms a part of this specification, and its novel features will be defined in the appended claims.

In the drawing, Figure 1 is a longitudinal 25 vertical section of a conventional form of vise, provided with the usual jaws, to which the improved removable and adjustable jaws are applied, Fig. 2 is a fragmentary perspective view showing the supplemental re-30 movable jaws in position upon the ordinary vise jaws, said removable jaws being in horizontal position, Fig. 3 is a similar view showing the removable jaws in vertical position with relation to the confronting faces of the 35 main vise jaws, Fig. 4 is a perspective view of one of the removable jaws detached, and Fig. 5 is a similar view of a modified form of removable jaw.

The reference numerals 1 and 2 designate 40 the usual coacting and opposing jaws of a vise adapted to be relatively adjusted by a screw 3 and lever 4.

Each of the confronting faces of the jaws 1 and 2 is formed with a squared socket 5 to re-45 ceive a correspondingly shaped stem 6, said stem projecting from the outer side of the jaw members 7.

Each jaw-member is formed of a body portion having parallel side faces and parallel ${\bf 50}\,$ end edge faces (excepting where one end face is brought to a sharp edge), the side edgefaces being inclined relatively to each other, one side edge-face being at right angles to the end edge-faces, while the opposite side 55 edge-face is at an acute angle to the end edge-faces, thereby providing a structure

which is approximately triangular or wedgeshape in form. The member is completed by the stem 6 which projects from the rightangled side edge-face.

The confronting faces 8 of the jaws 7 may be of any preferred shape, and in Figs. 1 to 4 inclusive said faces 8 are shown as oppositely beveled and provided with roughened or serrated surfaces the better to adapt them to 65 frictionally engage and grip the work 9 as shown in Fig. 1.

In Fig. 5 is shown a modification in which the grasping face of the jaw 7 is formed with a circular recess 10 extending entirely across 70 the jaw and formed with teeth 11 to firmly grip a piece of work having a rounded surface. This construction, or any other form of gripping face, may be substituted for the beveled faces shown in Figs. 1 to 4.

It will be noted that the jaws 7 may be arranged in horizontal position flush with the upper and lower surfaces of the jaws 1 and 2 as shown in Figs. 1 and 2, or in vertical position, at right angles to the faces of the jaws 80 1 and 2 as shown in Fig. 3. This result is obtained by the use of the particular stem and socket arrangement shown, in conjunction with the fact that the jaw members are secured in a position to abut against the grip- 85 ping surfaces of the vise jaws, so that the jaw members may be placed in either one of a plurality of positions with respect to the vise jaws, but are positively held against movement relative to said jaws when so po- 90 sitioned. Thus it will be apparent that the work may be clamped between the gripping faces of the jaws at various angles or in the position most convenient for the operator.

It is obvious that pairs of adjustable jaws 95 having gripping surfaces of varying shape may be employed in connection with a single vise, so that one pair of said jaws may be readily removed and another pair substituted as occasion may require.

The invention comprises all such modifications and variations in the details of the improvement as may be resorted to without departing from the terms and scope of the following claims.

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

1. The combination with a vise having jaws, of a jaw member removably carried by each of the vise jaws, said jaw-members be- 110 ing complemental to each other, the connection between the vise jaw and its jaw member being formed to permit the member to be placed in either one of a plurality of posi-

tions relatively to the vise jaw.

2. The combination with a vise having 5 jaws, each of said jaws having a socket in its gripping face, of a jaw member removably carried by each of the vise jaws, each jaw member having a projecting stem to fit the socket, the stem and socket being complementally formed to permit the jaw member to be placed in either one of a plurality of positions with respect to its vise jaw, said member, when so placed, being positively held against movement relatively to its sup-

porting jaw.
3. The combination with the main jaws of a vise, each formed on its inner face with an annular socket, of supplemental jaws removably seated in said socket, each of said supplemental jaws having an angular stem to fit in the socket of the vise jaw, and having a straight edge on the face carrying the stem to fit against the face of the vise jaw, the

opposite face of each of said supplemental jaws being at an acute angle to the rear 25 face, forming a wide and a narrow end on each supplemental jaw, the stem and socket connection permitting the jaw members to be placed in either one of a plurality of positions with respect to the vise jaws, and be retained against movement relative to said

jaws.

4. A supplemental jaw for vises, comprising a body substantially triangular in form, one side of which is at direct right angles to the ends and the other side of which is at an acute angle to the ends, and a stem carried by and formed integral with that face of the jaw which is at right angles to the ends, substantially as described.

In testimony whereof I affix my signature

in the presence of two witnesses.

ABRAHAM JOSEPH PERELES.

Witnesses:

MAX H. SROLOVITZ, F. O. McCleary.