No. 887,661. PATENTED MAY 12, 1908.

W. KUSS.

HAND VISE.

APPLICATION FILED DEC. 19, 1907.

Fig. 1.

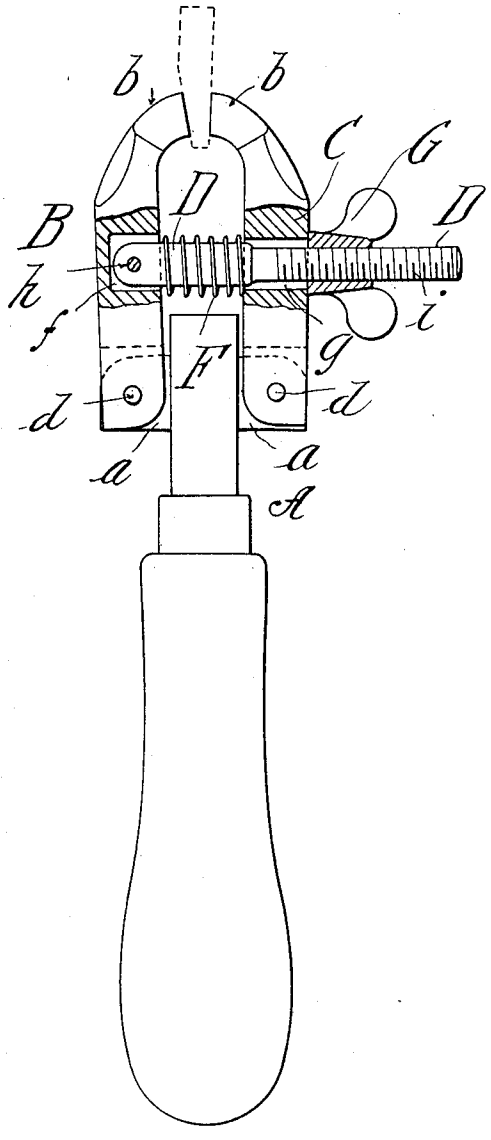
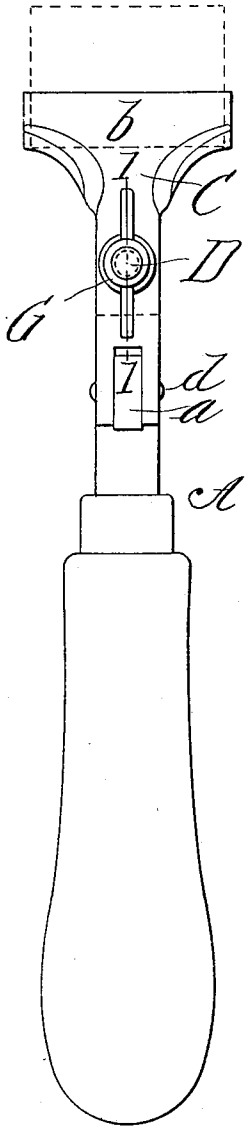


Fig. 2.



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WILLIAM KUSS, OF THREE RIVERS, MASSACHUSETTS.

HAND-VISE.

No. 887,661. Specification of Letters Patent. Patented May 12, 1908.

Application filed December 19, 1907. Serial No. 407,115.

To all whom it may concern:

Be it known that I, WILLIAM KUSS, a citizen of the United States of America, and resident of Three Rivers, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Hand-Vises, of which the following is a full, clear, and exact description.

This invention relates to improvements in hand vises and the same consists in a construction to constitute what I term an "eccentric vise", by reason of the capability which the same has for acquiring a one sided adjustment or displacement of the paired jaws relatively to the line of the stock or handle whereby the gripping faces of the jaws readily adapt themselves and conform to the surfaces of a piece to be held which may be beveled, or the one inclined relatively to the other.

The improved vise is illustrated in the accompanying drawings in which,—

Figures 1 and 2 are elevations at right angles to each other, portions of Fig. 1 appearing in central vertical section for clearer illustration.

In the drawings,—A represents a stock or handle having at an upper portion thereof, but preferably at a slight distance below the extreme top of the shank of the holding part oppositely extended rigid lugs or ear pieces *a a*.

B and C represent a pair of substantially similar jaw members having inwardly extending upper portions or jaws proper *b*, and said jaw members B and C which are bifurcated at their lower portions are matched over or to embrace the said ear lugs, and by the rivet or studs *d*, *d*, are pivotally connected thereto for transverse movement in unison to the one or the other side of the central line of the implement, as well as for their receding and approaching movements in relation to each other. The jaw B has an inwardly opening recess *f* within an intermediate portion thereof, while the other jaw C has an aperture *g* through its intermediate portion opposite the said recess.

D represents a bar or rod which at its one end is by pivot stud or rivet *h* connected to the jaw B,—the so pivoted end being disposed within the aforesaid recess *f*, while the screw threaded extremity *i* of the said bar protrudes through and beyond the recess of the other jaw C and receives the thumb nut G which is operable in a usual manner for constricting the vise jaws to grip a given piece of work. The spiral spring F which encircles the bar D between and in bearing against the inner faces of the opposite jaws exerts an outward reaction against the latter for opening the same when permitted by the proper positioning of the thumb nut. The capabilities for action especially for gripping the piece to be held, one of the surfaces of which is beveled or tapered relatively to the other, will be graphically shown on reference to Fig. 1 of the drawings. The jaws may be offset more or less from the central line of the implement and as readily at one side of such line as at the other, and, therefore, the vise has capabilities for convenient utilization as the result of the arrangement of parts in a new manner.

I am aware that it is not new at this time to connect the lower ends of oppositely located vise jaws to a stock or holder, by links, and to also link connect intermediate portions of the jaws to a higher portion of the holder; but the present device is distinguished from such vise construction,—in which the movements of the jaws are necessarily always in planes parallel with the axis of the holder,—by the constructions and arrangements embodied therein whereby jaws may be swung bodily in unison towards either side of the stock axis as, and for the purpose especially indicated in Fig. 1 of the drawings.

I claim:—

In a hand vise, a handle member embodying an extended shank, a pair of extended lugs located one on each side of shank at a slight distance below the outer end of the latter, a pair of jaw members each having a bifurcated lower end pivoted directly to said lugs so that their inner sides are located on said opposite sides of the shank but spaced therefrom, one of said jaws on its side face being formed with an inwardly opening recess forming a housing closed on all of its sides but one, the other of said jaws being formed with an opening extending through two of its sides, a rod having one end disposed in said housing, a pivot stud for securing said rod in said housing, the opposite end of said rod being threaded and passed through said opening of the other jaw, and a thumb nut on said threaded end of the rod.

Signed by me at Palmer, Mass., in presence of two subscribing witnesses.

WILLIAM KUSS.

Witnesses:
ORRIN P. ALLEN,
ARTHUR E. FITCH.