D. E. SHANKLAND & O. F. BROWN.

ATTACHMENT FOR THE JAWS OF VISES

APPLICATION FILED APR. 15, 1908.

915,490. Patented Mar. 16, 1909.

Fig. 1.

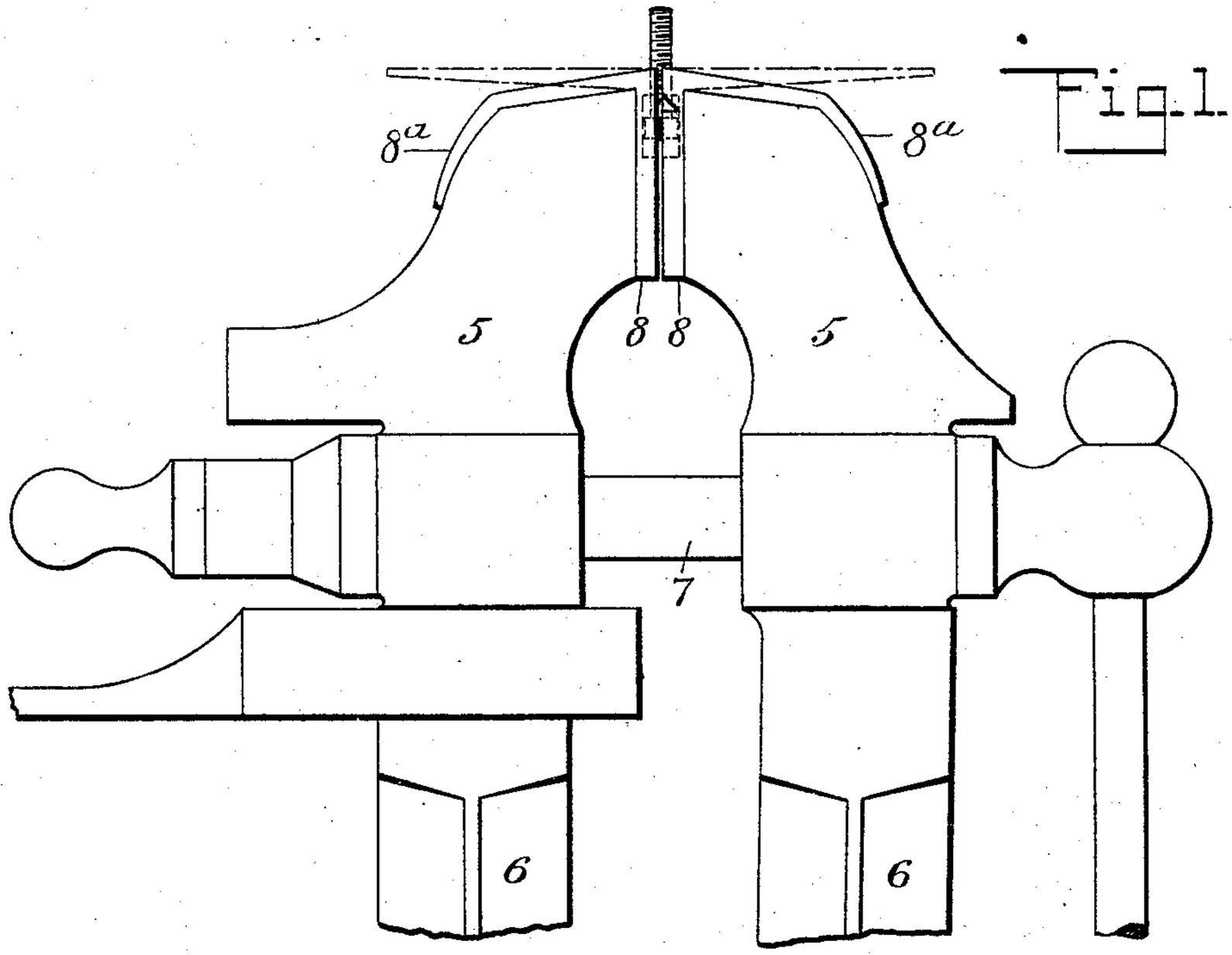


Fig. 2.

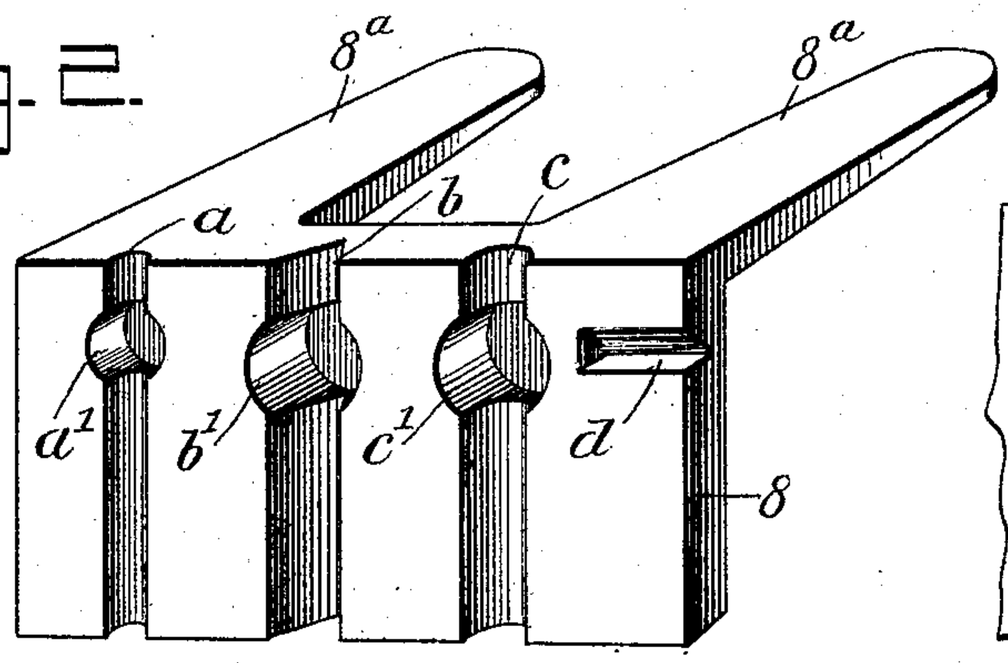
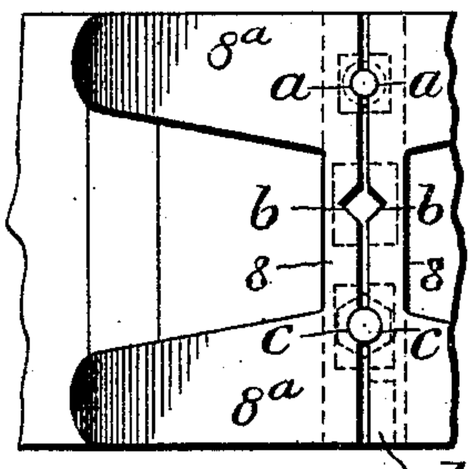


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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ATTACHMENT FOR THE JAWS OF VISES.

No. 915,490. Specification of Letters Patent. Patented March 16, 1909.

Application filed April 15, 1908. Serial No. 427,217.

To all whom it may concern:

Be it known that we, DAVID E. SHANKLAND and OREN F. BROWN, both citizens of the United States, and residents of Whiteriver, in the county of Rio Blanco and State of Colorado, have invented a new and useful Attachment for the Jaws of Vises, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide novel features of construction for a pair of false grip jaws, that will incase the fixed jaws of a metal vise, be detachable therefrom, and when in place afford means for gripping and holding the bodies of bolts, rods of metal either round or angular, and also grip and hold the toe calks of horse shoes or like objects without injury thereto, and aid to give correct shape to the gripped angular calks.

The invention consists in the novel construction and combination of parts, as is hereinafter described and defined in the appended claim.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of the upper portion of a smith's vise, and of the improved false jaws mounted thereon; Fig. 2 is an enlarged detached perspective view of the improved attachable jaws; and Fig. 3 is a plan view in part of the improvement mounted upon a corresponding portion of a metal vise.

In the drawings 5, 5 indicate a pair of metal vise jaws of ordinary shape, 6, 6 upright members of the vise whereon the jaws are integrally formed, said members being broken away to economize space, and 7 the screw for clamping one jaw toward the other as usual.

The improved false jaws which are mates and are conveniently attachable to and removable from the pair of jaws 5, are each constructed as follows: 8 represents a metal block of proper thickness and a marginal form that is substantially similar to that of the jaws upon which it is to be mounted. One or more flanges 8^a, two being shown, are integrally formed on the normally upper edge of the block 8, which for convenience may be designated a false jaw. The flanges 8^a are bent to give them a shape corresponding with the top surface of the respective vise jaws 5, so that they will fit closely thereupon as indicated in Fig. 1, and it will be seen in said view, that when the jaws 5, 5, are moved toward each other, the false jaws 8, 8, will finally come into contact. Oppositely in the faces of the false jaws 8, that may contact with each other, a plurality of vertical channels are formed, these channels being oppositely disposed in pairs, and each pair thereof may have a different shape, considered transversely, from the other channels. While the shapes given to the paired channels may be varied from the examples shown, it is preferred to give them the forms in cross section shown in Figs. 2 and 3.

It will be seen that the pair of channels *a*, *a*, formed in the false jaws 8, near one end thereof, together form a cylindrical walled opening that is vertically disposed, which by an adjustment of the jaws 5, 5, so as to open them, will receive between the half sections of said opening the body of a cylindrical bolt or rod, that is slightly larger than that of the defining wall of the opening *a*, *a*, and upon closure of the vise jaws the bolt body will be gripped between the concave surfaces *a*, *a*, and be immovably held therebetween without the slightest injury to said bolt or rod. In the next pair of opposed channels *b*, *b* that are V-shaped in cross section, the square body of a bolt or a rectangular nut may be gripped and held firmly. The next pair of channels *c*, *c*, have concave form and a greater diameter than that of the paired channels *a*, *a*, and are thus adapted for receiving and clamping a bolt body or rod that is cylindrical and of greater diameter than one which may be gripped by the concave formations *a*, *a*. Openings *a'*, *b'* and *c'* are transversely formed respectively in the paired channels *a*, *b*, *c*, these openings being designed for the reception of the heads of short bolts which are to be gripped in the false jaws 8 and be projected above them, this being very advantageous when threads are to be cut on short bolts.

In one false jaw 8 at or near one end thereof, an acute angular groove *d* is horizontally formed near the upper edge thereof, said groove being especially of service in the shaping of toe and heel calks on or for a horseshoe, the shoe being heated and placed in the vise, in such position that when the vise is closed the material will be pressed into the groove *d*, to shape the calk.

It will be seen that by the provision of the false jaws constructed as described, a metal

vise such as is used in blacksmiths' shops, will be rendered capable of holding bolts and rods of different diameter, either round or angular in the body, and in the manufacture of bolts their heads may be formed by upsetting the hot end of the bolt body, if the latter is gripped in an appropriate pair of channels in the false jaws 8.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

An attachment for the jaws of vises, consisting of blocks each provided with a plurality of laterally extending fingers adapted to be bent over the top surface of the vise jaws whereby to retain said blocks in place, the opposing faces of the blocks being provided with parallel vertical grooves, the grooves of one block coöperating with the grooves of the other block to form channels for receiving a bolt or the like, said grooves being provided adjacent the upper edge of the block with recesses for receiving the head of the bolt or like.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

DAVID E. SHANKLAND.
OREN F. BROWN.

Witnesses:
JAMES B. NIMERICK,
ADAM SMITH.