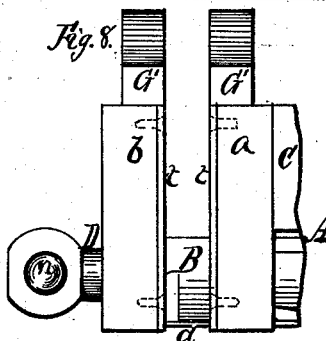
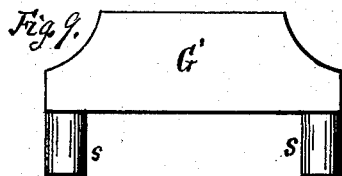
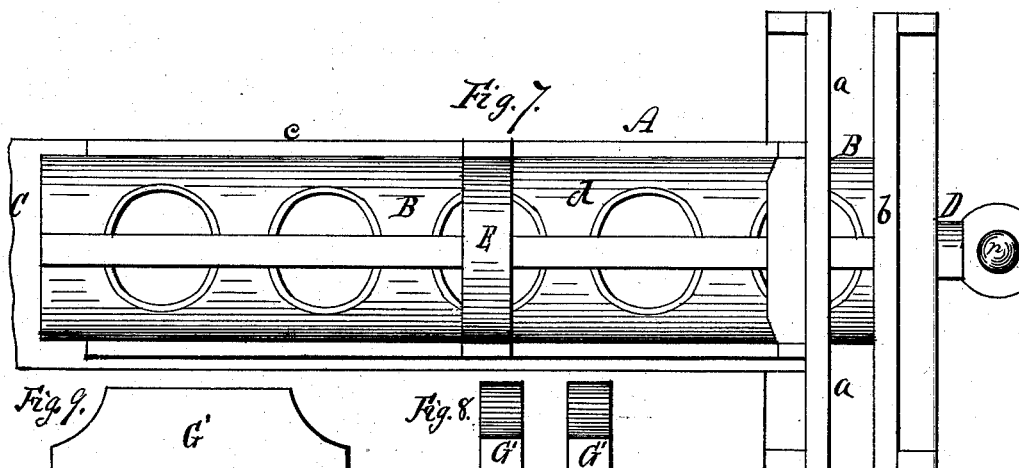
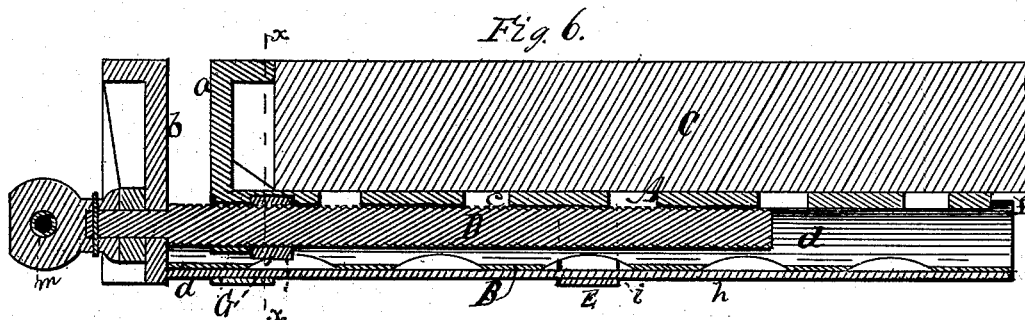


3 Sheets—Sheet 1.

No. 264,868.

Patented Sept. 26, 1882.



W. A. Jones.
J. C. Day

Amos Sales,
By his attorney,
J. S. Brown.

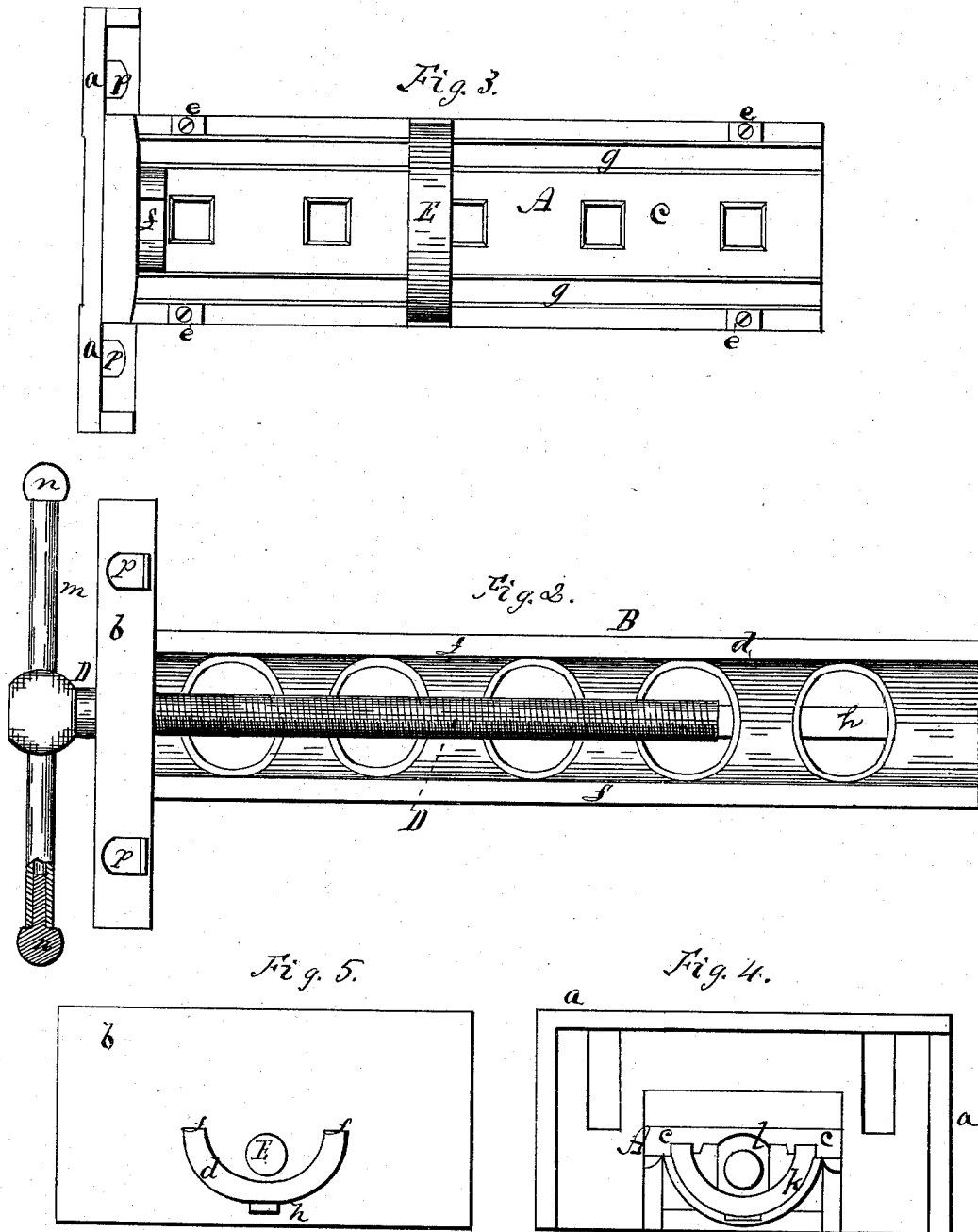
(No Model.)

3 Sheets—Sheet 2.

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CARPENTER'S VISE.

No. 264,868.

Patented Sept. 26, 1882.



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(No Model.)

3 Sheets—Sheet 3.

A. FALES.
CARPENTER'S VISE.

No. 264,868.

Patented Sept. 26, 1882.

Fig. 10.

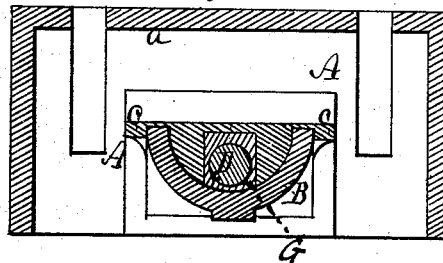


Fig. 11.

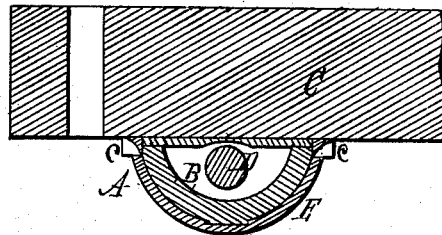
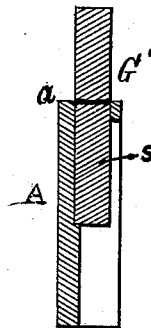


Fig. 12.



WITNESSES.

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UNITED STATES PATENT OFFICE.

AMOS FALES, OF DENVER, COLORADO.

CARPENTER'S VISE.

SPECIFICATION forming part of Letters Patent No. 264,868, dated September 26, 1882.

Application filed April 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, AMOS FALES, of Denver, in the county of Arapahoe and State of Colorado, have invented an Improved Carpenter's Vise; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side view of the vise as attached to a work-bench; Fig. 2, a top view of the movable section or part thereof; Fig. 3, a bottom view of the stationary section or part thereof; Fig. 4, a rear view of the stationary or fixed section; Fig. 5, a rear view of the sliding section; Fig. 6, a central vertical section of the whole vise in a plane at right angles to the clamping-faces of the two jaws, showing also how it is attached to a bench; Fig. 7, a view of the vise, showing a different mode of attaching it to and arranging it in connection with a bench; Figs. 8 and 9, detail views, showing an attachment to the vise; Fig. 10, a vertical section in the line *x x*, Fig. 2; Fig. 11, a vertical section in the line *y y*, Fig. 1; Fig. 12, a vertical section through the stationary jaw, showing also an extension-jaw attached thereto, as represented also in Fig. 8.

Like letters designate corresponding parts in all of the figures.

The construction of this vise and the several features of this invention will be specifically described.

The body of the vise is composed of two parts or sections, the fixed or bench section A bearing one jaw, *a*, of the vise, and the movable or sliding section B bearing the other jaw, *b*, of the vise. These sections are preferably made of cast-iron for quickness and cheapness of manufacture. Each section has an extended horizontal arm or bar at right angles to the faces of the jaws, respectively, the arm *c* of the fixed section having a nearly flat form horizontally to fit under the top of the bench C, to which it is attached by screws *e e*, and the arm *d* of the sliding section having preferably the form of a segment of a cylinder, with its concave surface uppermost to fit under the arm *c* of the fixed section at its edges, and to inclose between the two the clamping-screw D. The upper edges, *f f*, of the arm *d* may run in

shallow grooves *g g* in the under side of the arm *c*, and there may be also a longitudinal projection, *h*, on the bottom of the arm *d* to run in a notch-guide, *i*, of a band or loop, E, which is secured at its ends to the arm *c*, and embraces and supports thereby the arm *d*. Both of the arms *c* and *d* may be made with openings, as indicated, to render them light. The arm *d* of the sliding section also passes through and slides in an aperture, *k*, of corresponding form through the head of the fixed section A. This section also has a recess or socket, *l*, to receive and hold the movable nut G of the screw D. This nut is preferably made of brass, the screw and the strap or band E of wrought-iron, and the screw-handle *m*, for lightness, of a piece of gas-pipe, with wooden plugs or knobs *n n* in the ends thereof.

This vise is most generally to be attached to the under side of the bench-top C, as shown in Fig. 6, the upper edges of the jaws *a* and *b* coming up flush with the top of the bench; and if the bench-top is not of the exact thickness to allow this the arm *c* of the fixed section is let into the lower side of the bench-top far enough to effect this; or, if the bench-top is too thin, a filling-strip is placed between the said arm *c* and the under side of the same to make the position as required. In this position the sections of the vise have holes or sockets *p p*, as well as in the top of the bench, to hold pins to abut the work against in planing, &c.

Another mode of applying the vise is indicated in Fig. 7, it being turned a quarter of a circle, and the fixed section screwed to the end of the bench-top, and as the jaws *a b* are wider than deep their edges, in this position, will project above the bench, as shown. In other cases the vise may be secured upon the top of the bench, its position being the reverse of that in Fig. 5. The vise is to be used both at the head and foot of the bench.

In Fig. 8 I have shown removable jaws G' G', which are attached to the main jaws of the vise. These extension-jaws are very useful in some cases—as, for instance, when the main jaws *a b* are flush with the top of the bench—and it is desirable at any time to have the jaws temporarily reach above the bench. Fig. 9 shows one of the extension-jaws removed.

Each jaw has two downward projections or tenons *s s*, which fit accurately into the sockets *p p* of the main jaw, above specified.

For some kinds of work it is desirable to have the faces of the jaw of a softer material than usual. In Fig. 8 I have shown facings *t t*, which may be of leather or other desired material, and attached to the jaws by screws or other suitable means.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a vise, the combination of the fixed section A, provided with an arm, *c*, for attaching it to the under side of a bench or table, having an aperture, *k*, in its head and a supporting loop or band, E, attached to its arm, and a movable section, B, provided with an arm,

d, sliding in the head-aperture of the section A, and supported by the loop or band E under the arm *c* thereof, the said movable section also carrying the screw D, which turns in nut G, located in a socket, *l*, in the fixed section, substantially as and for the purpose herein specified.

2. The combination, with the sections A B, of a vise having socket-holes *p p* in their jaws *a b*, of the extension-jaws G' G', fitting in the said socket-holes, substantially as and for the purpose herein specified.

AMOS FALES.

Witnesses:

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A. C. LEWIS.