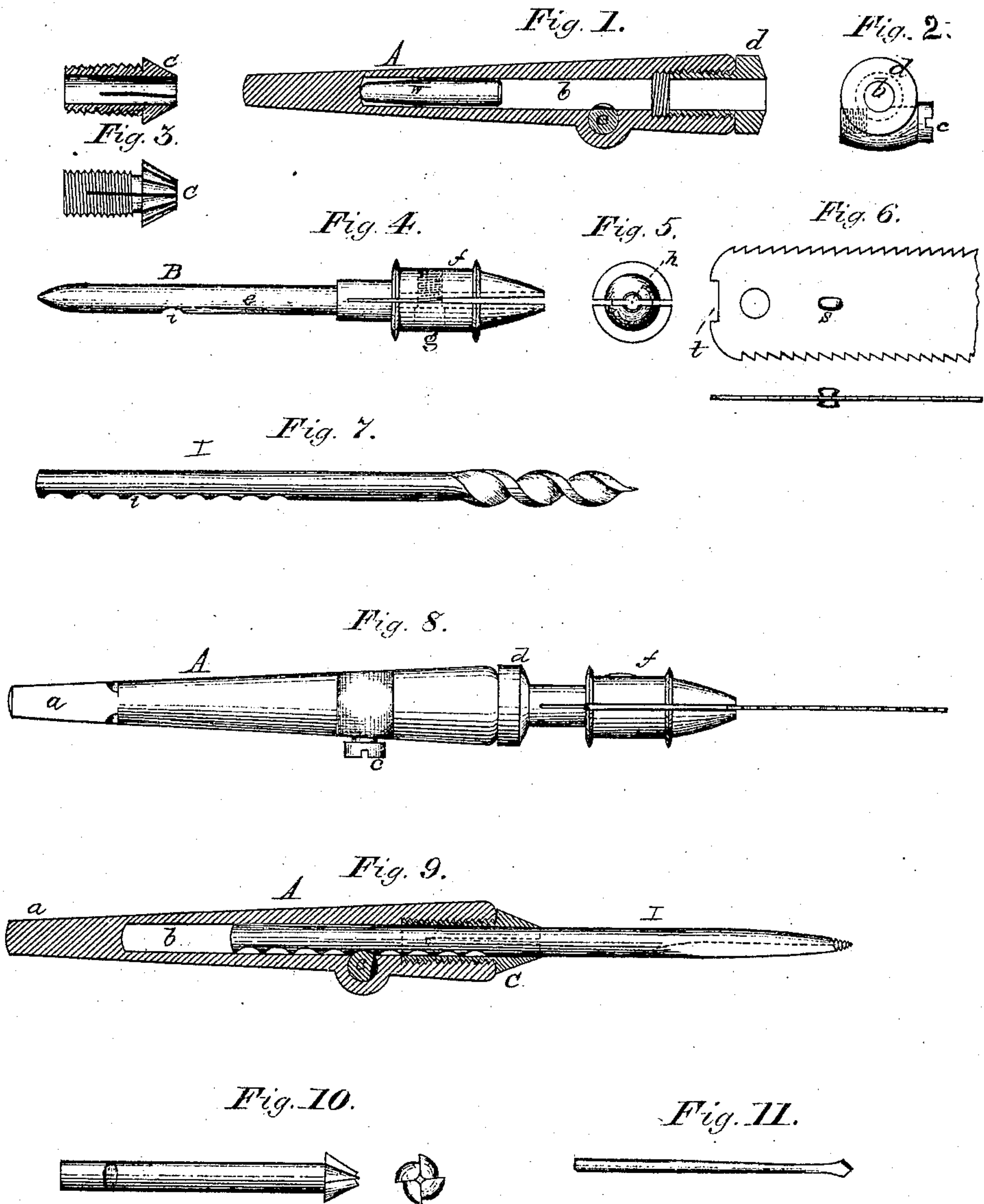


R. F. Buttle,

Tool Handle.

No. 103975.

Patented June 7. 1870.



Witnesses:
Phil. O. Dodge
Thomas Taylor, Jr.

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by Dodge & Munn
his atty.

United States Patent Office.

REUBEN P. BUTTLES, OF MANSFIELD, PENNSYLVANIA.

Letters-Patent No. 103,975, dated June 7, 1870.

IMPROVEMENT IN TOOL-HOLDERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, REUBEN P. BUTTLES, of Mansfield, in the county of Tioga and State of Pennsylvania, have invented certain Improvements in Tool-holding Device, of which the following is a specification, reference being had to the accompanying drawing.

My invention consists in a tool-holder or handle that may be used in connection with a bit-stock or a gimlet-handle, for holding and operating augurs, gimlets, drills, countersinks, reamers, screw-drivers, &c., or alone, as a handle for chisels, key-saws, files, awls, &c., or as a bow drill-stock, all as hereinafter explained.

Figures 1 and 2 are respectively a longitudinal section and an end view of the body of my holder.

Figures 3, 6, 7, 10, and 11, are views of tools used in connection with my handle.

Figures 4 and 5 are a side and an end view of the removable chuck, which also serves as a drill-spindle.

Figure 8 is a side view of my handle with the chuck inserted, and a saw secured therein.

Figure 9 is a longitudinal section of my holder with a bit and countersink attached, showing the arrangement for boring holes of a uniform depth, and countersinking the same at one operation.

The body A of my holder I construct of metal, substantially in the form shown in figs. 1, 8, and 9, providing it at one end with a square shank, *a*, and boring in from the opposite end a longitudinal hole, *b*, which may extend nearly through the body, and inserting through the body a loose pin or screw, *c*, flattened upon one side, which, when in one position, comes flush with hole *b*, but, when turned over, projects into said hole, as shown in figs. 1 and 9. I then provide my various tools, such as bits, reamers, gimlets, and screw-drivers, with shanks of the proper size to fit the hole *b*, and with notches *i* in said shanks, as shown in figs. 7, 9, and 10, and then insert the one desired for use, and turn the locking-pin *c*, so as to lock into one of the notches, and thus secure the tool to the handle, as shown in fig. 9.

The bits I insert so that their ends will project a distance equal to the depth of the required hole, the head *d* thus serving as a stop to prevent the bit from penetrating too deep, this arrangement being especially useful in boring sash and blinds, where many holes of a uniform depth are required, and where the ordinary bits are liable to pass accidentally through the bars, thus marring their appearance.

If it is desired to bore holes and countersink them, the head *d* is removed and a tubular countersink *e* slipped over the bit and screwed in place of the head, as in fig. 9, so as to come into operation when the bit has reached the desired depth, and thus the holes may be bored and countersunk simultaneously.

When very small bits are used, whose shanks are of less diameter than the hole *b*, and it is required to countersink the holes made by them, I use a countersink, *e'*, fig. 3, made tapering and slotted longitudi-

nally, so that, by screwing it into the end of the body, it may be compressed around the bit, so as to hold the same rigidly in place.

In addition to the body A I provide a chuck or spindle, B, consisting of a stem, *e*, and head *f*, the former being provided with a notch whereby it may be secured within the body A, and the latter having a longitudinal hole, *h*, at the center, and being split longitudinally, and provided with a screw, *g*, whereby the halves may be compressed upon any object placed between them.

When it is desired to use awls, drills, files, &c., the chuck B is secured within the body or handle A, and then the ends of the tools inserted in hole *h* of head *f*, and the screw *g* turned to compress the head upon them; but, when saws and similar flat tools are to be used, they are provided on opposite sides with studs *s*, and with a hole through the end, as in fig. 6, and, the screw *g* being removed, they are inserted between the jaws of the head, and the screw *g* replaced, so as to pass through the hole in the tool, as shown in fig. 8.

When my holder is to be used as a bow drill-stock I drop into the hole *b* a hardened steel block, *w*, having a depression in its front end, to serve as a bearing for the chuck or spindle, and then insert the chuck, secure the drill in its front end, and pass the bow-string around the head *f*, when the device will operate with as much ease and facility as a stock constructed for the especial purpose.

It is, of course, obvious, that a bit-stock or handle is only used in connection with my device when using tools which require to be rotated, the holder alone serving as a handle for files, saws, and other tools, which receive a reciprocating motion.

In selling my improved device, the intention is to provide the tool-holder with a full set of small tools adapted to be used with it, and fit the whole in a suitable case, and thus sell the whole together in sets, thereby furnishing a complete kit of small tools for the use of mechanics and others having use for them.

Having thus described my invention,

What I desire to secure by Letters Patent, is—

1. The tool-holder A, provided with the removable head *d*, and locking-pin *c*, constructed substantially as described.

2. In combination with the tool-holder A, the countersink *e*, when constructed and arranged to operate substantially as and for the purpose set forth.

3. The supplemental tool-holder or chuck B, having the stem *e*, and the split and recessed head *f* for holding drills, saws, files, and similar tools, and adapted to be used in combination with the holder A, substantially as described.

4. The combination of the holder A, chuck B, and socket-pin *w*, constructed and arranged to operate as described.

REUBEN P. BUTTLES.

Witnesses:

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