

Kimball & Parsons,

Wood Auger.

N^o 52,174.

Patented Jan. 23, 1866.

Fig. 1.

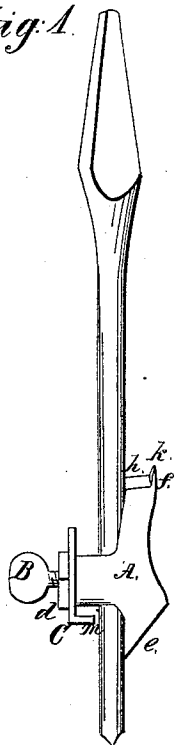


Fig. 3.



Fig. 2.

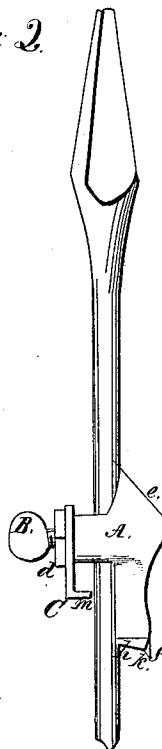
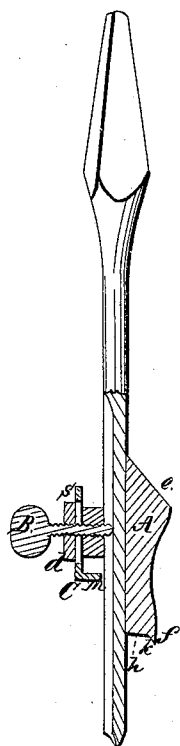


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES F. KIMBALL AND ALEXR. PARSONS, OF PORTLAND, MAINE.

IMPROVEMENT IN BITS FOR BORING HOLES.

Specification forming part of Letters Patent No. 52,174, dated January 23, 1866.

To all whom it may concern:

Be it known that we, CHARLES F. KIMBALL and ALEXANDER PARSONS, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Adjustable Countersink and Gage; and we hereby declare the following to be a full, clear, and exact description thereof, which will enable others to make the same, reference being made to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows a side view of our invention attached to a bit; Fig. 2, the same reversed from Fig. 1; Fig. 3, a front view, in perspective, showing the form of the cutters; Fig. 4, a section of Fig. 3 and the manner of securing the device to a bit.

The object of our invention is to produce a device by means of which, when attached to a bit or other boring-tool, holes can be cut for the reception of screw-heads and the depth of the holes made both by the boring-tool and our invention can be regulated at the same time the hole is made for the reception of the screw.

Our invention consists of a piece of steel perforated so as to permit the passage through it of a bit or other boring-tool and having at either end a knife or cutter of the forms hereinafter described, and also a gage, C, nut *d*, and screw B, in combination.

The piece of steel upon which the two cutters are constructed is shown at A, and the cutters at *f* and *e*, respectively.

The part A, having the cutters, is secured in its position by the screw B pressing against the bit, as shown in Fig. 4. By relieving the bit from this pressure the device can be entirely removed. Either cutter can be employed by adjusting the device with the one desired to be used turned downward toward the end of the bit, as shown in Figs. 1 and 2.

The knife *e* is made inclined at an angle from the bit, as shown in Figs. 1 and 2, for the purpose of cutting a hole large at the top

than at the bottom, so as to receive a screw-head.

The knife *f* is composed of the vertical blade *k* and the part *h*, which are intended to cut a depression in the wood the sides of which shall be perpendicular.

Upon the screw B are fitted the gage C and the nut *d*. The purpose of the gage is to control the depth to which either of the above-described knives shall penetrate the wood upon which they may be used. The gage turns easily upon the screw, but can be secured in position by the nut *d*. It is provided with a slot, *s*, Fig. 4, so that it may slide up and down on the screw B, and by this the depth to which the cutters are desired to penetrate the wood upon which they are used is regulated and controlled. When the horizontal portion *m* rests upon the wood the further penetration of the bit and countersink is prevented.

By applying our invention to a bit or other boring-tool when holes for the reception of screws are intended to be made, depressions for the reception of the screw-head and the hole for the reception of the screw can be made at a single operation. At the same time the extent to which both the boring-tool and the countersink can penetrate can be governed by the gage.

The portion A of our invention can be made of any suitable form, combining the knives, as described, and fitted with the hole for the reception of the bit, &c., and provided with the screw-gage and nut, as before specified.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination of the part A, having the hole and knives *e* and *f*, as described, with the screw B, the nut *d*, and the gage C, all as and for the purposes specified.

CHAS. F. KIMBALL.

ALEXANDER PARSONS.

Witnesses:

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