

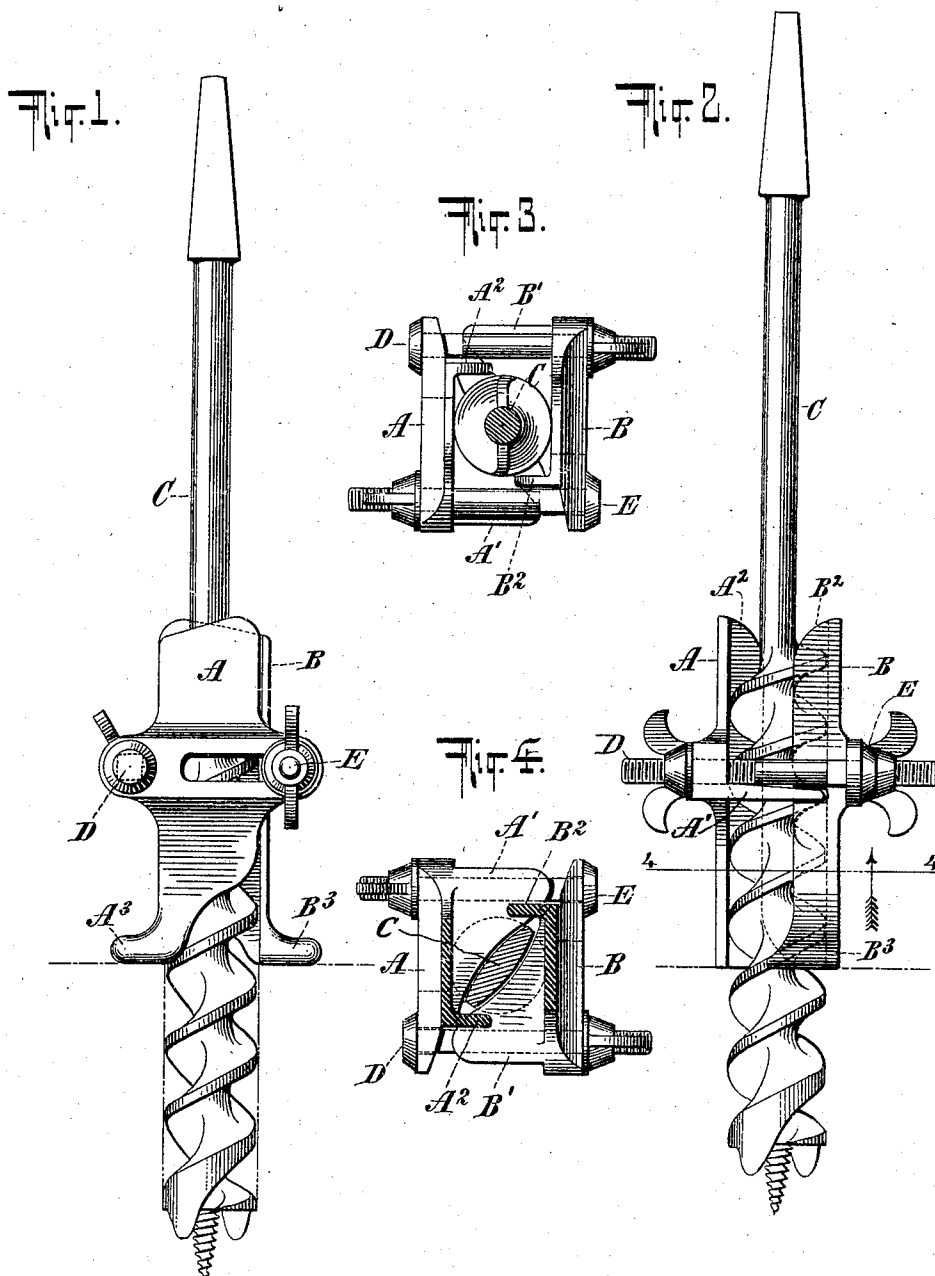
No. 772,211.

PATENTED OCT. 11, 1904.

A. D. CAMPBELL.
BIT GAGE.

APPLICATION FILED MAY 19, 1904.

NO MODEL.



WITNESSES:

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ARTHUR D. CAMPBELL, OF WILKESBARRE, PENNSYLVANIA, ASSIGNOR
TO THE STANLEY RULE & LEVEL COMPANY, OF NEW BRITAIN, CON-
NECTICUT, A CORPORATION OF CONNECTICUT.

BIT-GAGE.

SPECIFICATION forming part of Letters Patent No. 772,211, dated October 11, 1904.

Application filed May 19, 1904. Serial No. 208,659. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR D. CAMPBELL, a citizen of the United States, residing at Wilkesbarre, county of Luzerne, State of Pennsylvania, have invented certain new and useful Improvements in Bit-Gages, of which the following is a full, clear, and exact description.

My invention relates to improvements in carpenters' tools, and particularly to a bit-gage.

The object of my invention is to provide a simple and effective device which can be readily adjusted upon a bit or auger in such a manner as to limit the cutting depth of the tool. Such a device possesses great utility. In the use of a bit or auger it is practically impossible for a workman to gage with any degree of certainty the depth of the hole being bored unless he removes the tool from time to time and measures it. By my improvement the depth of the cut may be accurately determined.

The device itself is not only simple and effective, but it is inexpensive and is of such construction that it will not bruise or injure the tool to which it is applied.

Figure 1 is a side elevation of my invention as applied to an ordinary bit. Fig. 2 is a side elevation viewed from a point at right angles to the plane of Fig. 1. Fig. 3 is a plan view of the parts shown in Fig. 2. Fig. 4 is a cross-section on the line 4 4, Fig. 2, looking up.

A B are two separable clamping members or plates. Each of these plates is preferably of considerable length to give a long flat inside bearing-surface to engage with the surface of the screw of the bit C. By this arrangement the clamping-pressure of the plates A B against the outer edge of the bit will not tend to bruise or injure the same in the slightest.

A' B' are inwardly-directed fins on plates A B, respectively. Each of these fins A' B' presents an oppositely beveled or inclined edge, as best seen in Fig. 4. These beveled edges when the parts A B are in position are spaced apart approximately the thickness of the adjacent screw-section of the bit C, and

when the parts are assembled the fins project into the spiral channel between the screw-threads of the bit.

D E are bolts carried by the plates A B. Each of the plates A B is slotted to receive the said bolts, whereby the clamping members A B may be moved toward each other without binding on the said bolts.

In the preferred form of the construction the plates A B are each provided with an angle-piece A² B² at diagonally opposite edges, so that when said plates A B are in place the screw portion of the bit C is held in these angles. (See Figs. 3 and 4.) It will be seen from an inspection of these views that if a smaller bit were used it would be necessary to have these clamping members A B approach each other in such a manner as to bring the angular portions directly toward each other in a diagonal line. To accomplish this, the members A B are slotted. The slot in the member A may be seen in Fig. 1 and its presence permits the member A to be moved toward the member B in a diagonal line without binding on the bolt. At the lower ends of the members A and B there are feet A³ B³, the soles of which encounter the surface of the wood into which the bit is being introduced when it has been introduced the predetermined distance.

It is obvious that when the clamping members A B are applied to a bit and set securely in position by the screws D E the gage is prevented from rotating on the bit by reason of the long inside surface engagement of the plates A B therewith. The presence of the fins A' B' between the threads of the screw prevents the longitudinal shifting of the gage on the bit unless one part is rotated relatively to the other.

If it is desired to change the position of the gage upon the bit C, the same may be done by loosening the screws D E and rotating the gage so that it will move up or down to the desired extent.

By means of this gage carpenters may proceed to bore holes of a certain given depth with a confidence that the said depth will be

reached and not exceeded. One size of gage may be applied to several sizes of bits.

What I claim is—

1. In a gage for a bit or auger, a plate arranged to bear flatwise against the outer side of a bit, a fin projecting laterally from said plate and arranged to extend into the spiral channel of the body of the bit and bear against said bit in said spiral channel and a clamping device for holding said plate against said bit.

2. In a gage for a bit or auger, a plate arranged to bear flatwise against the outer side of a bit, a fin projecting laterally from said plate and arranged to extend into the spiral channel of the body of the bit and bear against said bit in said spiral channel and a clamping device for holding said plate against said bit and a second plate and fin similarly constructed coöperating with the first plate and engaged by said clamping device.

3. A gage for a bit or auger comprising a plate having an angular extension at one end thereof, said plate and angular extension be-

ing arranged to bear flatwise against the outer side of the bit, a fin projecting laterally from said plate and arranged to project into the spiral channel of the body of the bit and engage said bit in said channel, and a clamping device for holding said plate and fin in position.

4. In a gage for a bit or auger, a plate arranged to bear against the side of a bit, an angular extension at one edge of said plate, a fin on the same side of said plate as said angular extension the edge of said fin being arranged on an incline with its low point near said angular extension a second plate similarly constructed and arranged to coöperate with the first-mentioned plate and a clamping device arranged to draw said plates toward each other.

Signed at Wilkesbarre, Pennsylvania, this 17th day of May, 1904.

ARTHUR D. CAMPBELL.

Witnesses:

JOHN P. POLLOCK,
ROBERT S. KAUFMAN.