

No. 877,831.

PATENTED JAN. 28, 1908.

P. J. CREEDON.

AUGER BIT.

APPLICATION FILED MAR. 4, 1907.

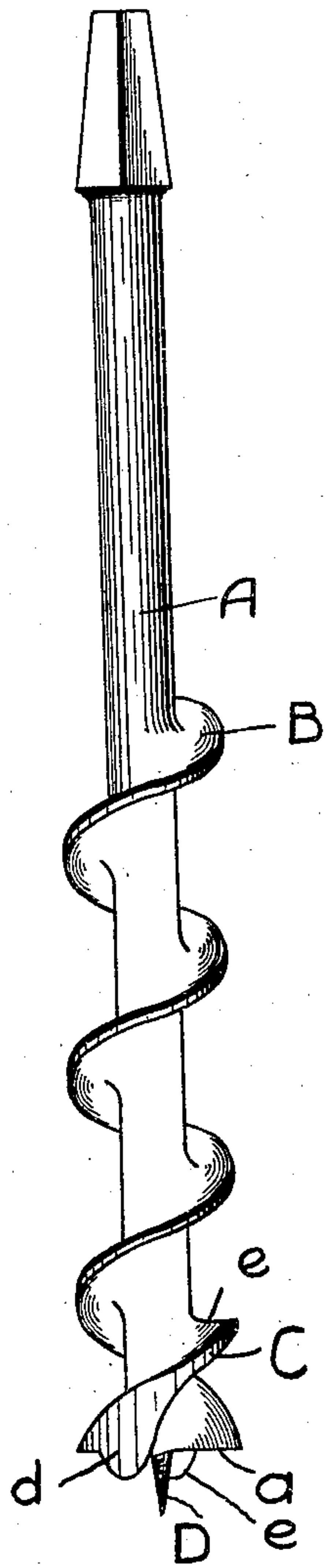


FIG. 1.

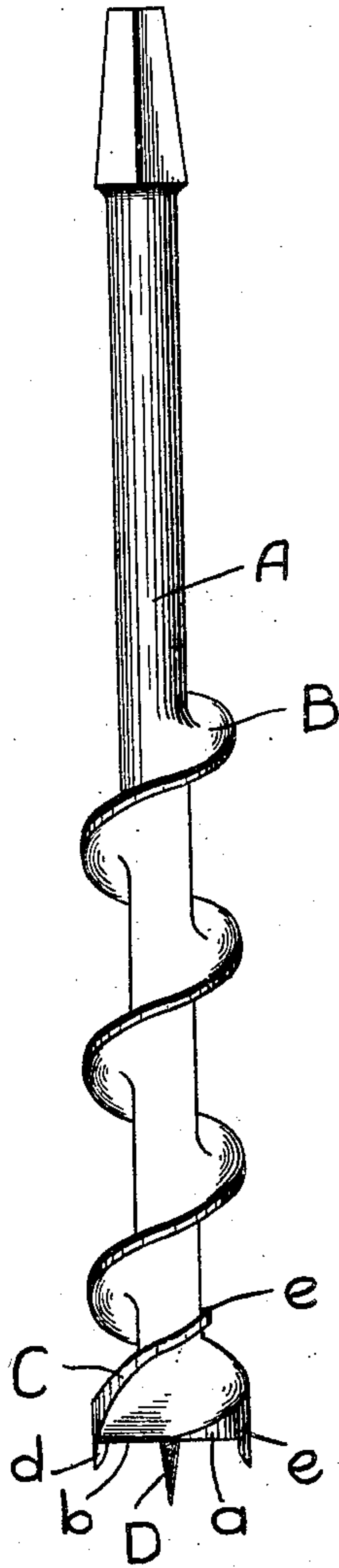


FIG. 2.

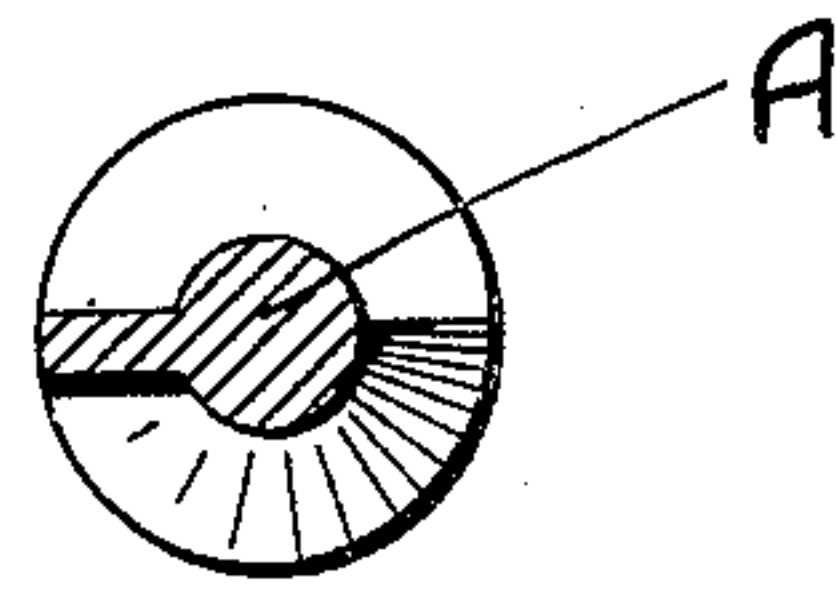


FIG. 4.

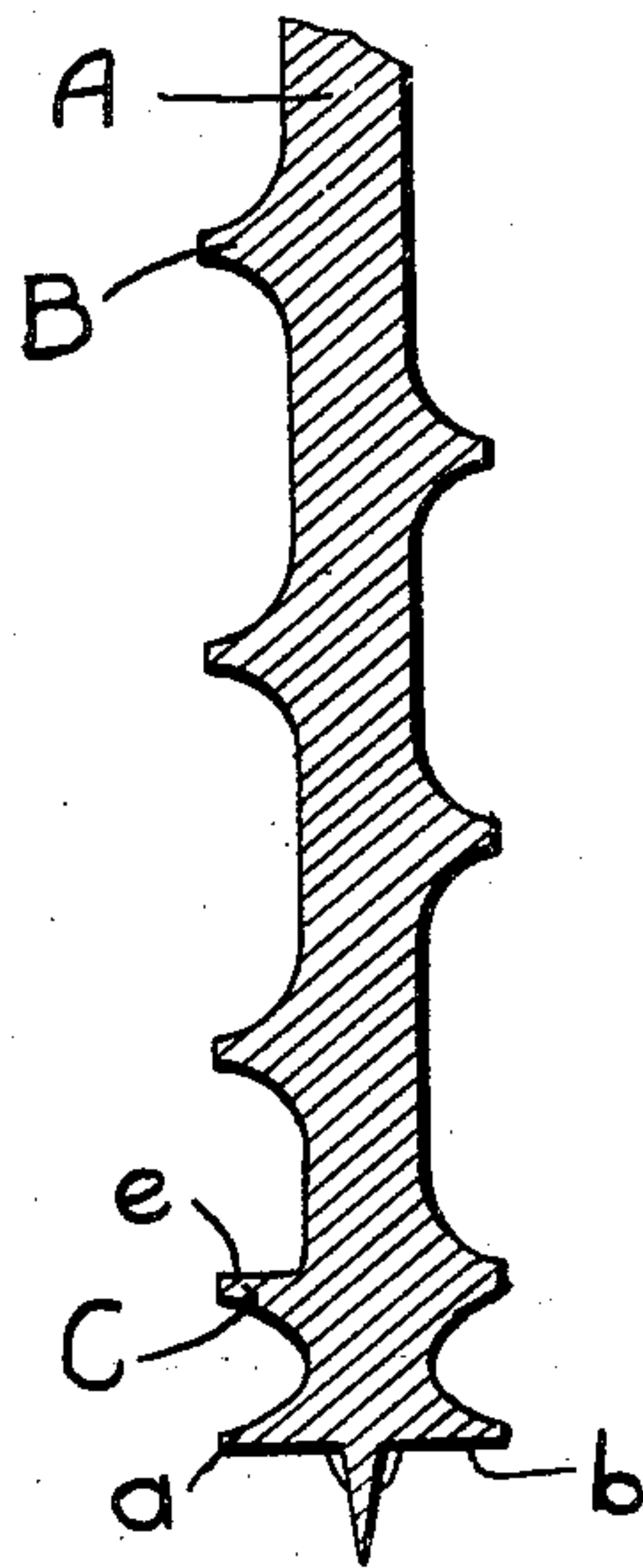


FIG. 3.

WITNESSES.

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PATRICK J. CREEDON, OF PETERBOROUGH, ONTARIO, CANADA.

AUGER-BIT.

No. 877,831.

Specification of Letters Patent.

Patented Jan. 28, 1908.

Application filed March 4, 1907. Serial No. 360,574.

To all whom it may concern:

Be it known that I, PATRICK JOSEPH CREEDON, of Peterborough, in the county of Peterborough, Province of Ontario, Canada, have invented certain new and useful Improvements in Auger-Bits, of which the following is a specification.

My invention relates to an improved auger bit, and the objects of my invention are to overcome the tendency of the bit to catch in the sides of the hole as it is being withdrawn therefrom; and it consists essentially of a bit having a single main spiral web with a cutting edge at the bottom in combination with a second spiral web of constant radius which extends over the cutting edge, of the main web, and so protects the same from catching in the sides of the hole, all as hereinafter more fully set forth and described in the accompanying specifications and drawings.

In the drawings, Figure 1 is an elevation of my improved auger bit. Fig. 2 is a view of the bit taken at an angle to that of Fig. 1. Fig. 3 is a central vertical section through the bit in the position shown in Fig. 2. Fig. 4 is a horizontal section on the line 2—2 Fig. 3.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the stock of the auger and B the main spiral web ending as usual in the substantially horizontal cutting edge *a*.

C is the second or auxiliary short spiral web which has a pitch slightly less than the web B but has a radius equal thereto. This web ends in a substantially horizontal cutting edge *b* which is diametrically opposite the edge *a*. This web extends only a short distance up the axis and stops at the point *e* as soon as it has overlapped slightly the cutting edge *a*. This second web may stop abruptly as shown, or may, if desired, be gradually tapered until it coincides with the main spiral.

The pitch of the short spiral being slightly

less than that of the main spiral brings their edges closer together and so better insures the even formation of the beginning of the hole. The auger is provided with the usual screw point D and downwardly extending side cutters *d* and *e*. In boring the hole the auger bit operates in the usual manner but in withdrawal the short spiral C, overlapping the cutting edge of the main spiral prevents the same catching in the walls of the hole as frequently occurs with the old form of bit. This short spiral, being of the same diameter as the main spiral, further assists in keeping the beginning of the hole uniform and true.

I am aware that augers having a central main spiral web with a second web which extends a short distance and runs into and coincides with the main web, have been constructed, but in these the short web does not extend over and protect the cutting edge of the main web after the manner of my invention.

It will, therefore, be readily understood that while I have described with great particularity of detail one specific embodiment of my invention, yet changes may be made therein within the scope of the appended claims without departing from the spirit of the invention.

What I claim as my invention is:

An auger having a main spiral web with a cutting edge at the bottom thereof, and having also a second, short spiral web which has a pitch less than that of the main web and extends sufficiently around the axis of the bit to overlap said cutting edge.

Signed at Peterborough, in the Province of Ontario, Canada, this 24th day of January, 1907.

PATRICK J. CREEDON.

Witnesses:

EDWARD B. FOWLER,
BERTRAND W. McCLENNAN.