

(No Model.)

W. CALDWELL.
POINT FOR AUGERS.

No. 504,018.

Patented Aug. 29, 1893.

Fig 1

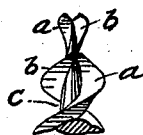
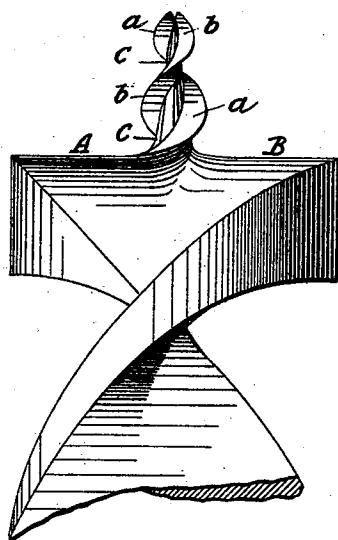


Fig 3

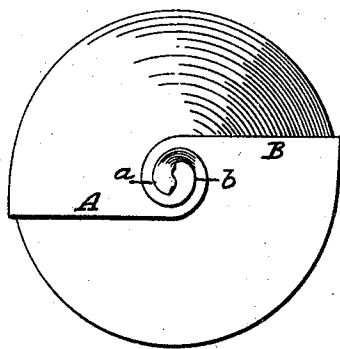


Fig 2

Witnesses
Elyakth B. Baldwin
Isaac B. Owens

Inventor,
William Caldwell
per
James T. and Phoebe G. DuBois
his Attys.

UNITED STATES PATENT OFFICE.

WILLIAM CALDWELL, OF COOLAMON, NEW SOUTH WALES.

POINT FOR AUGERS.

SPECIFICATION forming part of Letters Patent No. 504,018, dated August 29, 1893.

Application filed January 31, 1893. Serial No. 460,187. (No model.) Patented in New South Wales December 11, 1890, No. 2,671, and in England July 28, 1891, No. 12,810.

To all whom it may concern:

Be it known that I, WILLIAM CALDWELL, contractor, a subject of the Queen of Great Britain and Ireland, residing at Coolamon, in the Colony of New South Wales, but temporarily residing at Melbourne, in the Colony of Victoria, have invented certain new and useful Improved Points for Augers and Similar Tools, (for which I have obtained Letters Patent in New South Wales, No. 2,671, dated December 11, 1890, and in the United Kingdom of Great Britain and Ireland, No. 12,810, dated July 28, 1891;) and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention consists in an improved construction of the points of augers and similar tools whereby the auger is rendered more efficient, by preventing the point from choking, and increasing the rate of speed at which the tool is capable of working.

In carrying my invention into effect the cutting edge of each lip of the auger is continued as a spiral thread of wide or open pitch around the core or central cone of the point, thus producing a double-threaded screw, each thread terminating beyond the apex of the cone or core in a sharp radial cutting edge, thus forming a double point, which double point I speak of as the improved "point of the auger."

In the accompanying drawings:—Figure 1, is a side elevation of the end of an auger showing my improved point. Fig. 2, is a plan view of the same. Fig. 3, is a side elevation of my improved point, the view being taken at about right angles to that shown in Fig. 1.

In the drawings A and B are the cutting lips of the auger, the inner ends of each of which are continued as spiral threads, of wide or open pitch around the core C or central

cone of the point. The spiral threads *a*, *b*, meet at a point at or just beyond the apex of the conical core C and preferably form two sharp radial cutting points somewhat like wings. It is essential to the satisfactory working of the point of the tool that the threads around the cone C should be of an open or wide pitch though not necessarily the pitch shown in the figures; so that the screw point as it draws the auger into the wood shall bite the wood firmly without splitting it and will at the same time draw the tool to its work at an increased rate of speed.

On referring to the drawings it will be seen that the threads *a* and *b* only cover the surface of the cone C a sufficient amount to afford a proper bearing to the bases of the thread, the greater portion of the cone retaining its uniform cone shaped surface. By arranging the threads upon the cone in this way the threads are prevented from choking with the debris from the hole, and the work done by the auger will thereby be facilitated.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

An auger having a conical point and two wide or open pitch threads on the said conical point, the threads decreasing in size as they approach the apex of the point and extending beyond the apex of the point, whereby two radial cutting wings or points are formed, substantially as shown and described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

WILLIAM CALDWELL.

Witnesses:

G. G. TURIS,
Patent Solicitor, Melbourne.
E. F. NICHOLLS,
Clerk to G. G. Turis.