(No Model.)

S. SMITH.
AUGER BIT.

No. 597,750.

Patented Jan. 25, 1898.

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United States Patent Office.

SINCLAIR SMITH, OF BROOKLYN, NEW YORK.

AUGER-BIT.

SPECIFICATION forming part of Letters Patent No. 597,750, dated January 25, 1898.

Application filed March 24, 1897. Serial No. 628, 957. (No model.)

To all whom it may concern:

Be it known that I, SINCLAIR SMITH, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Bits or Augers, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to bits or augers for use by linemen or bell-hangers in wiring buildings for telephone, telegraph, and other and similar purposes; and the object thereof is to provide an improved device of this class which is adapted to carry a wire or to draw the wire through a partition, board, or other portion of a structure or building.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of a bit or auger made according to my invention; Fig. 2, a section thereof on the line 22, and Fig. 3 an end view thereof.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same letters of reference in each of the views, and in the practice of my invention I provide a bit A, which may be of any desired size and length and which is provided with the usual spiral end or head similar to other bits of this class.

The spiral end or head of the bit is formed by means of two spiral grooves, and these 35 spiral grooves are connected at regular intervals by transverse perforations or openings B, and the head or spiral end of the bit may be provided with as many of these perforations or openings as desired, and in practice 40 I also form one of these perforations in the shank of the bit, as shown at B², and in wiring a building the wire is passed through the perforation or opening B² and is carried through the partition or other part of the 45 building with the bit, as will be readily understood, and after the bit has been passed through the partition the wire may be detached therefrom and drawn on through, while the bit may be withdrawn in the usual manner.

Instead of connecting the wire with the bit and passing it through the partition therewith the wire may be connected with the bit

by one of the perforations or openings B, preferably the end one, after the bit has been passed through the partition, and the wire may 55 be drawn through the partition with the bit in removing the latter.

This device is adapted for use in wiring any part of a building or other structure or in passing wires through window-frames, window-60 casings, door-frames or door-casings, or any other portion of said building or structure.

The head of the bit is larger than the shank, and the spiral grooves therein extend the full length thereof, and said head being of greater 65 diameter throughout its length than the shank the grooves extend from the smaller diameter of the shank adjacent to the head to the cutting-point, this construction being adopted in order that the wire may be drawn through 70 a partition or other structure, which could not otherwise be done.

The point of the bit is shown at C in Figs. 1 and 3, and, as is well known, these bits are in use worn away and resharpened, and the object of providing a number of the perforations or openings B is to provide means whereby the entire bit may be employed for the purpose specified, the successive openings or perforations being used as the end thereof is 80 sharpened or worn away. It will also be apparent that the openings or perforations B may be made of any desired size, so as to carry wires of different sizes, and the bit may be made as large in diameter and as long as nec-85 essary.

It will be observed that the perforations or openings B are formed in the central portion of the bit or the spiral thereof and that the wire is adapted to drop into the thread or 90 spiral, and my improvement is well adapted to accomplish the result for which it is intended, and it will be apparent that changes in and modifications of the construction herein described may be made without departing 95 from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A bit or auger for use in wiring buildings, composing a shank and head, the head being of greater diameter than the shank throughout its length, and being provided

with two spiral grooves which extend throughout its length, from the smaller diameter of the shank adjacent to the head to the cuttingpoint and a plurality of transverse perfora-5 tions or openings formed in the head, by which said grooves are connected, substantially as shown and described.

2. A bit or auger for use in wiring buildings, composing a shank and head, the head to being of greater diameter than the shank throughout its length, and being provided with two spiral grooves which extend throughout its length, from the smaller diameter of the shank adjacent to the head to the cutting-15 point and a plurality of transverse perforations or openings formed in the head, by which said grooves are connected, said shank being also provided adjacent to the head with a transverse perforation or opening, substan-20 tially as shown and described.

3. A bit or auger for use in wiring build-

ings comprising a shank and head, the head being of greater diameter than the shank throughout its length, and being provided with two spiral grooves which extend through- 25 out its length from the smaller diameter of the shank adjacent to the head to the point, said head being also provided with a transverse perforation by which said grooves are connected adjacent to the cutting end of said 30 head, and said shank being also provided with a perforation adjacent to said head, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in pres-35 ence of the subscribing witnesses, this 23d day

of March, 1897.

SINCLAIR SMITH.

Witnesses:

C. GERST, A. C. VAN BLARCOM.