

(No Model.)

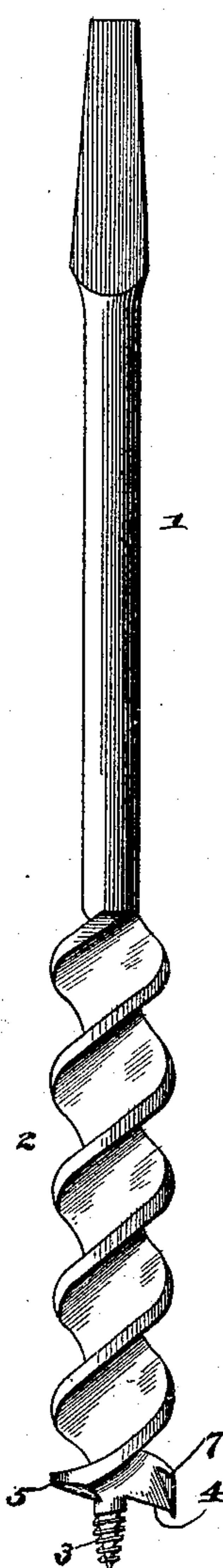
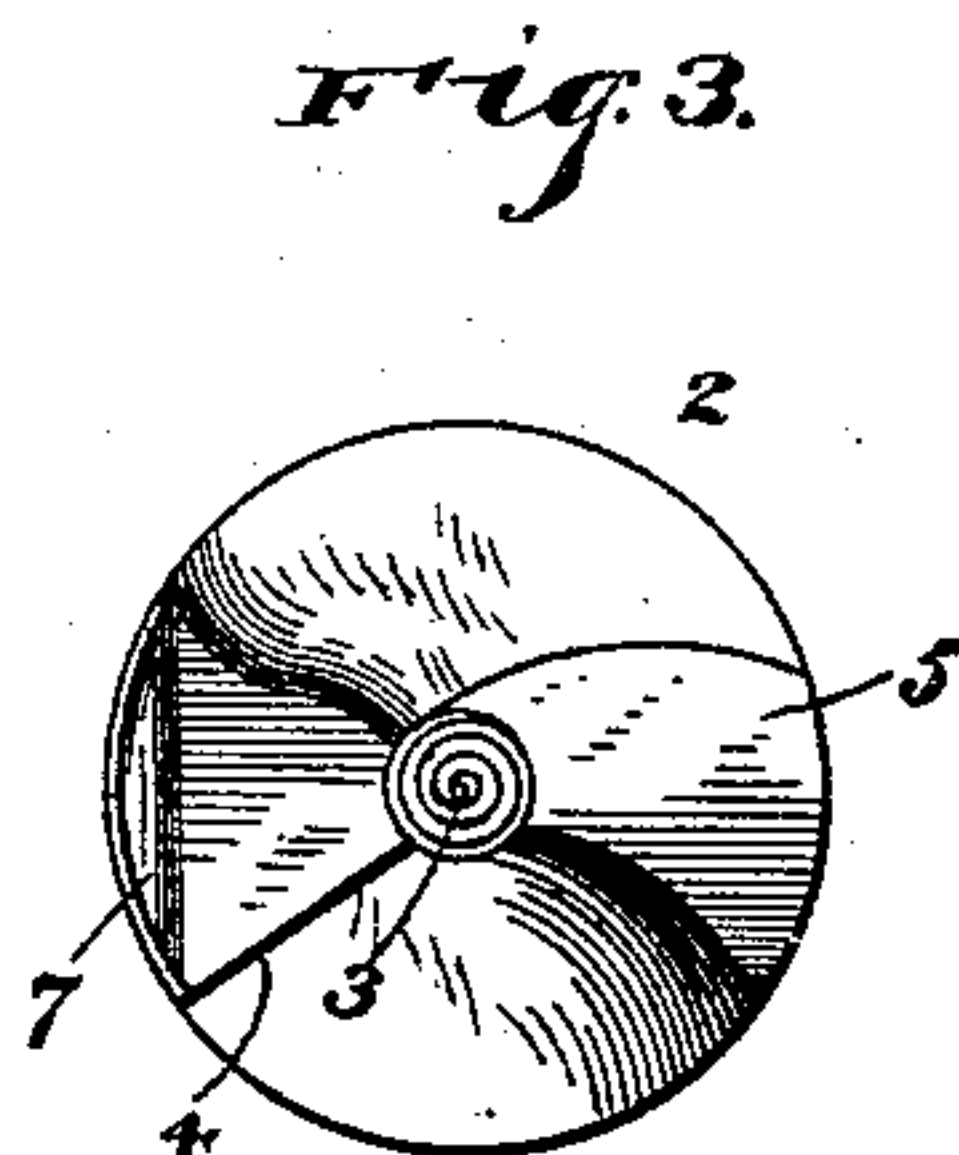
W. DODGE.
BIT.

No. 494,251.

Patented Mar. 28, 1893.

Fig. 1.

Fig. 2.



Witnesses

B. S. Ober.
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UNITED STATES PATENT OFFICE.

WILLIS DODGE, OF BLAINE, MAINE, ASSIGNOR OF ONE-HALF TO JOHN H. BUBAR, OF SAME PLACE.

BIT.

SPECIFICATION forming part of Letters Patent No. 494,251, dated March 28, 1893.

Application filed February 16, 1892. Serial No. 421,724. (No model.)

To all whom it may concern:

Be it known that I, WILLIS DODGE, a citizen of the United States, residing at Blaine, in the county of Aroostook and State of Maine, have
5 invented a new and useful Bit, of which the following is a specification.

My invention relates to improvements in augers or bits, the objects in view being to provide a bit which by its peculiar formation
10 will obviate clogging, reduce friction between the spiral of the bit and the shaving or chip; and which will otherwise facilitate cutting.

Other objects and advantages of the invention will appear in the following description,
15 and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figures 1 and 2 are side elevations of a bit embodying my invention, the views being taken from opposite sides thereof. Fig. 3 is an enlarged or
20 exaggerated bottom plan view of the bit.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 denotes the shank of the bit or auger, 2 the spiral, and 3 the screw at the lower end of the latter. The shank, spiral and screw are all of the ordinary construction, my invention lying in the lower extremity of the
25 spiral.

In practicing my invention, I employ the two cutting-edges 4 and 5, the latter forming a continuation of the thread of the screw 3. The cutting-edge 5 is what may be termed a drag or shear-edge, in that it is slightly
35 rounded or curves rearwardly toward its outer end, from the direction of rotation of the bit. This edge also inclines upwardly from the axis of the bit to its outer end, so that its cutting spur 6 is elevated above the point
40 where the cutting-edge 5 meets the screw. It will thus be seen that the edge 5 will cut from the screw to a point barely beyond midway the same, the shaving being confined as produced to the center of the spiral. The cut-

ting-edge 4, contrary to the disposition given
45 the cutting-edge 5, is preferably straight, and radiates from the axial center of the screw and declines toward its outer end. By this disposition given the edge 4, it will be seen that the shaving is cut from its outer end toward its cen-
50 ter, thus completing the removal of the shaving left remaining by the edge 5, and the shaving removed by the cutting-edge 4 will be directed more toward the outer edge of the spiral, as will be obvious. From this it will
55 be seen that I have provided an auger or bit, that is adapted to facilitate the operation of boring by reducing the friction between the spiral and wall of the opening being formed, and furthermore by facilitating the entrance
60 of the cutting-edges into the wood, and disposing the shavings in such manner as to prevent choking.

Having described my invention, what I
claim is—
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1. The herein-described improved boring-tool, comprising the shank, spiral and screw, the said spiral terminating at opposite sides of the screw in cutting-edges, one of which
70 inclines from the screw to its outer end, and the other of which declines from the screw toward its outer end, substantially as specified.

2. The herein-described improved boring-tool, the same consisting of the shank, a spiral and a screw, the spiral terminating at opposite sides of the screw in cutting edges,
75 one of which inclines from the screw to its outer end and is slightly curved opposite to the direction of movement of the tool, and the other of which declines from the screw to
80 its outer end, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIS DODGE.

Witnesses:

E. S. LOWELL,
J. M. RAMSEY.