## S. A. Siriith

## Bit and Ityr.

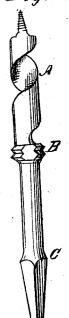
W<sup>Q</sup>95,846.

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Fig. 1.



Fig. 2.



Witnesses:

J. H. Shumay a & Libbertz

Inventor;

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## United States Patent Office.

S. A. SMITH, OF NEW HAVEN ASSIGNOR TO THE CENTRE BROOK MANU-FACTURING COMPANY, OF CENTRE BROOK, CONNECTICUT.

Letters Patent No. 95,846, duted October 12, 1869.

## IMPROVEMENT IN COMBINED BIT AND TAP.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, S. A. SMITH, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Combined Bit and Tap; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in-

Figure 1, a side view, looking toward the edge of

the cutter; and in
Figure 2, a side view, turned one-fourth around. This invention relates to an improvement in bits. especially designed to be used by cabinet-makers and others, for attaching wood knobs to drawers, &c.

Such knobs are now commonly constructed with a wooden screw, made a part of the knob; and to attach such knobs, a hole is first bored with a common bit, of the proper size, and afterward, by another instrument, the hole is tapped to cut a corresponding thread in the hole for the insertion of the knob-screw.

The object of my invention is to construct a bit with the tap combined, so that the same instrument, following through the hole, will cut the thread in the

To enable others skilled in the art to make and use my invention, I will proceed to describe the same, as illustrated in the accompanying drawings.

A is the bit, of any convenient form or known construction, preferring, as here represented, a single-twist auger-bit. It is made short, inasmuch as it is only required to bore through the fronts of drawers, and the like.

Directly above the twist, and so that the twist of the bit will form a guide, I construct the tap B, by cutting two or more threads larger than the barrel of the bit, so that the said thread will follow the bit through the hole, and cut the thread therein.

Above the thread the shank is formed in the usual manner, and the bit is used in the common brace or other suitable instrument.

Having fully described my invention,

What I claim as new and useful, and desire to secure by Letters Patent, is-

The bit and tap, constructed and combined in one and the same piece, as shown and described, as an improved article of manufacture.

S. A. SMITH.

J. H. SHUMWAY, A. J. TIBBITS.