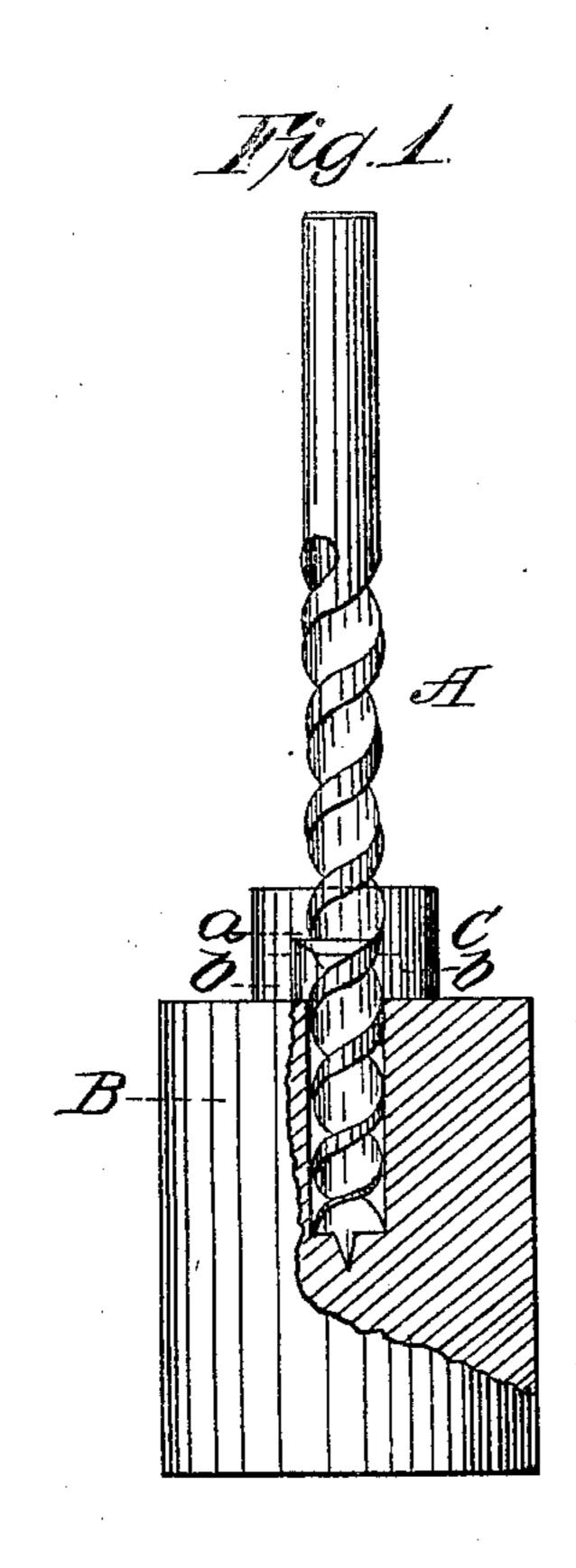
I. C. Keith,

Wood Auger.

Nº 62,754. Patented Mar. 12,1867.



Mitnesses. a La 1.13. Vincent 3. Ja. J. J. Thurston.

Inventor.
Topley & Keith

## Anited States Patent Office.

## TOPLEY C. KEITH, OF VALLEY FALLS, RHODE ISLAND, ASSIGNOR TO JOSEPH K. MALLERY, OF SAME PLACE.

Letters Patent No. 62,754, dated March 12, 1867.

## IMPROVEMENT IN AUGERS.

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

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, Topley C. Keith, of Valley Falls Smithfield, in the county of Providence, and State of Rhode Island, have invented a new and useful Improvement in Centre-Bits; and I do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

Figure 1 shows the same in perspective.

It is a well-known fact that a centre-bit will not make a perfectly cylindrical hole, even when it is required to enter a piece of wood for only a short distance as compared with the length of the twisted portion of the bit. The reason of this fact is that the chips are forced upward as the bit enters, and deposit themselves upon the surface of the board in a pile around the twist of the bit, when, unless they are constantly being removed, portions of them will jam between the sides of the hole and the convolutions of the bit, and tend to ream the hole of greater diameter at the top than at the bottom. For this reason workmen who desire to bore a hole which shall be of the same diameter throughout are accustomed to brush away the chips as scon as they appear within reach. To provide a means for causing the bit to clear itself of chips is the object of my invention.

In the accompanying drawings, A is the ordinary centre-bit, and B a block of wood, through which a hole is to be made. C is a circular disk of metal, or washer surrounding the bit, with a central hole made through it sufficiently large to admit the bit freely. The under side of this disk is cut away at different points, as shown at a, and the edges of the metal around them shown are chamfered. The legs b b, formed by the intervening portions of the metal not cut away, rest upon the surface of the block around the hole made by the bit or auger as it is entering. I have found by the use of this device the chips, as the bit enters the wood, will, upon coming to the surface, be crowded out through these apertures, and be thus cleaned away from around the mouth of the hole instead of piling about it as heretofore. The advantages of such an arrangement, where holes are required to be bored with great rapidity by machinery, as, for instance, in the manufacture of spools for thread, are very decided, and the holes when finished are as perfectly cylindrical as they would be if without the device all chips were removed by hand.

What I claim as my invention, and desire to secure by Letters Patent, is-

The use, application, or employment of a clearing disk C, substantially as described, in combination with an auger or centre-bit, as described for the purposes specified.

TOPLEY C. KEITH.

Witnesses:

W. B. VINCENT,

J. D. THURSTON.