

W. T. Huntington.

Earth Auger.

N^o 85,741.

Patented Jan. 12, 1869.

Fig. 2.

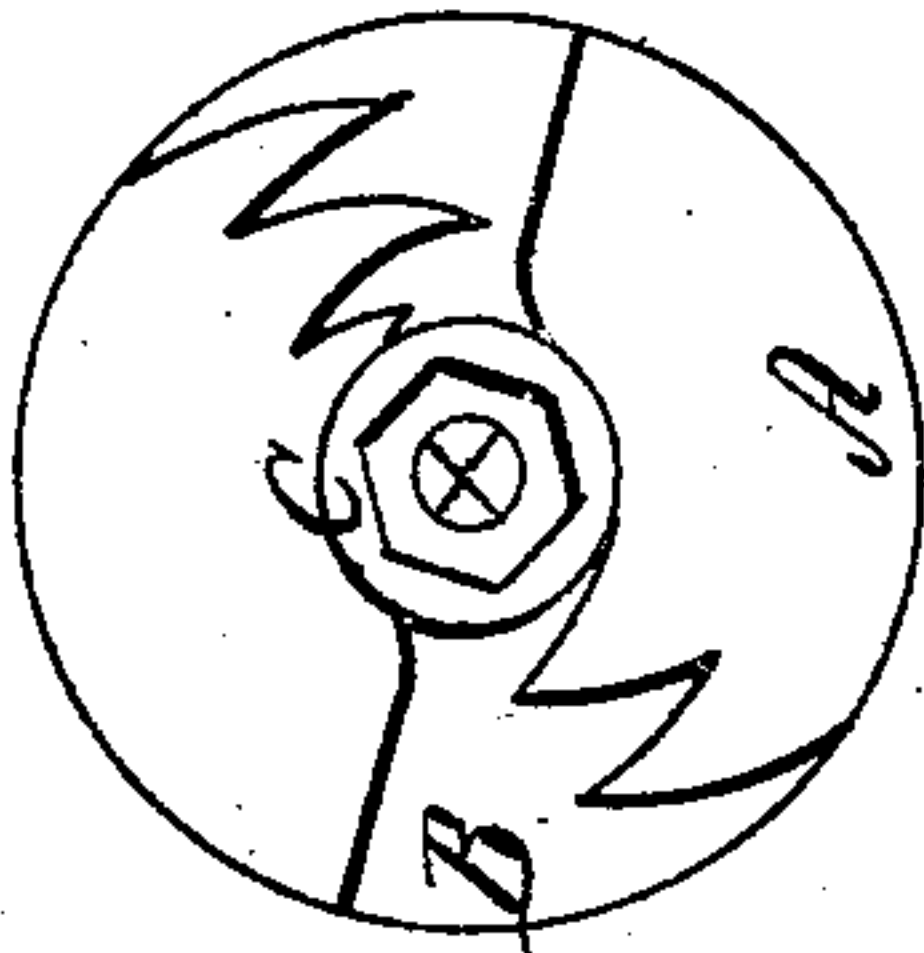


Fig. 5.

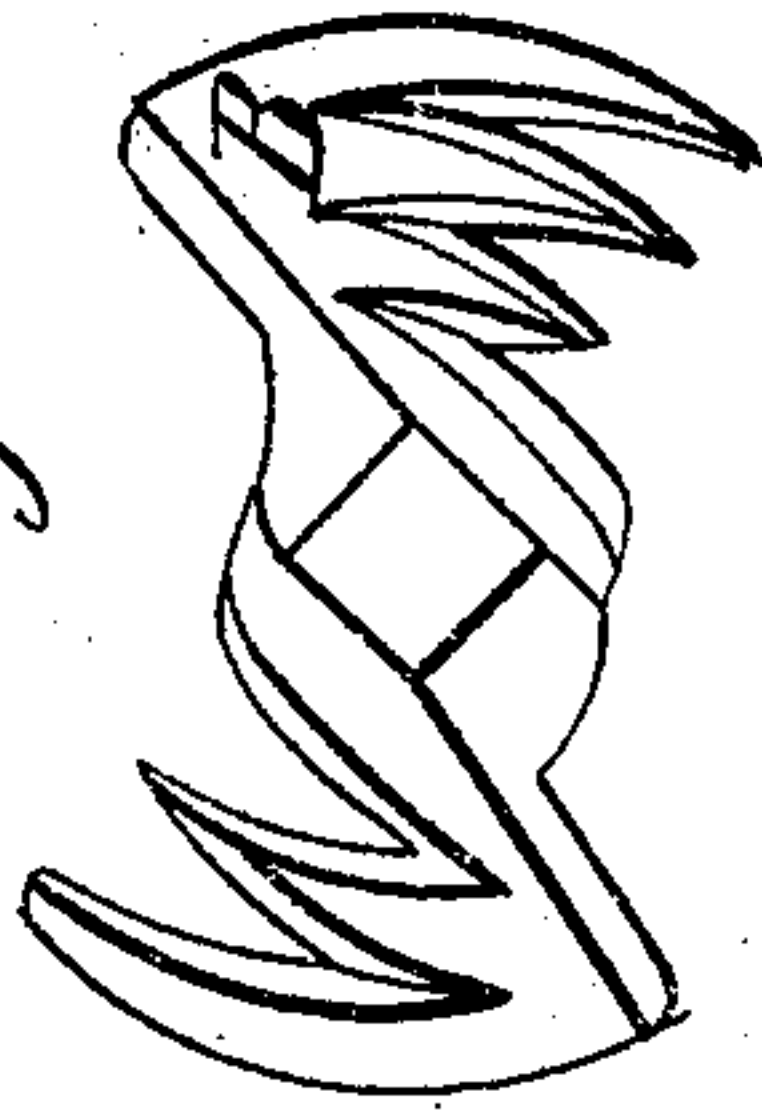


Fig. 1.

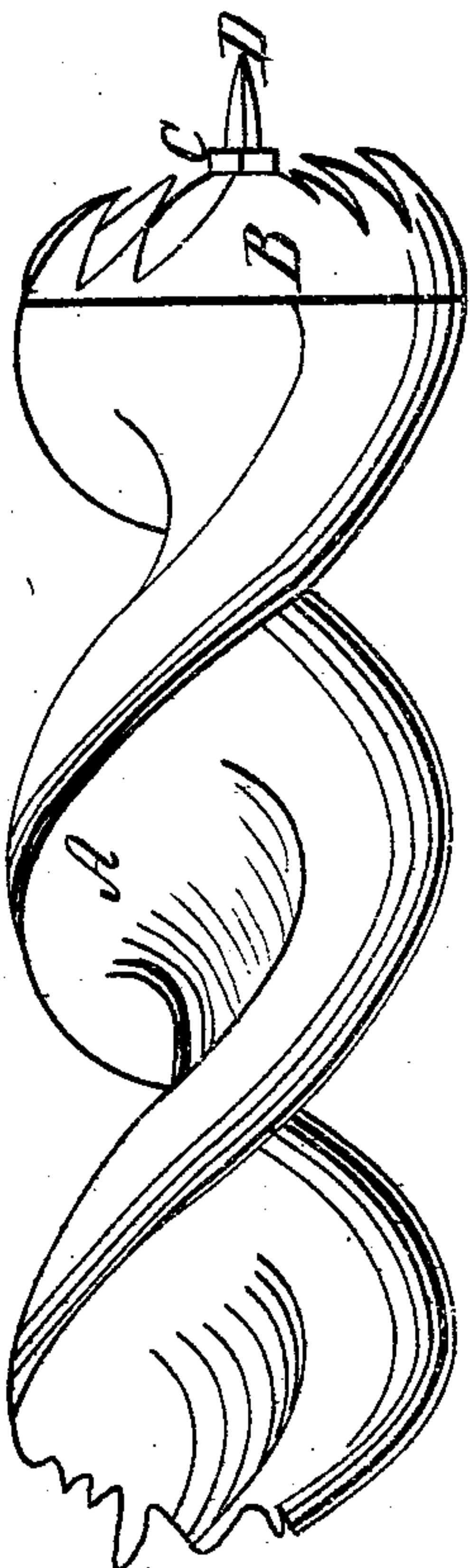


Fig. 4.

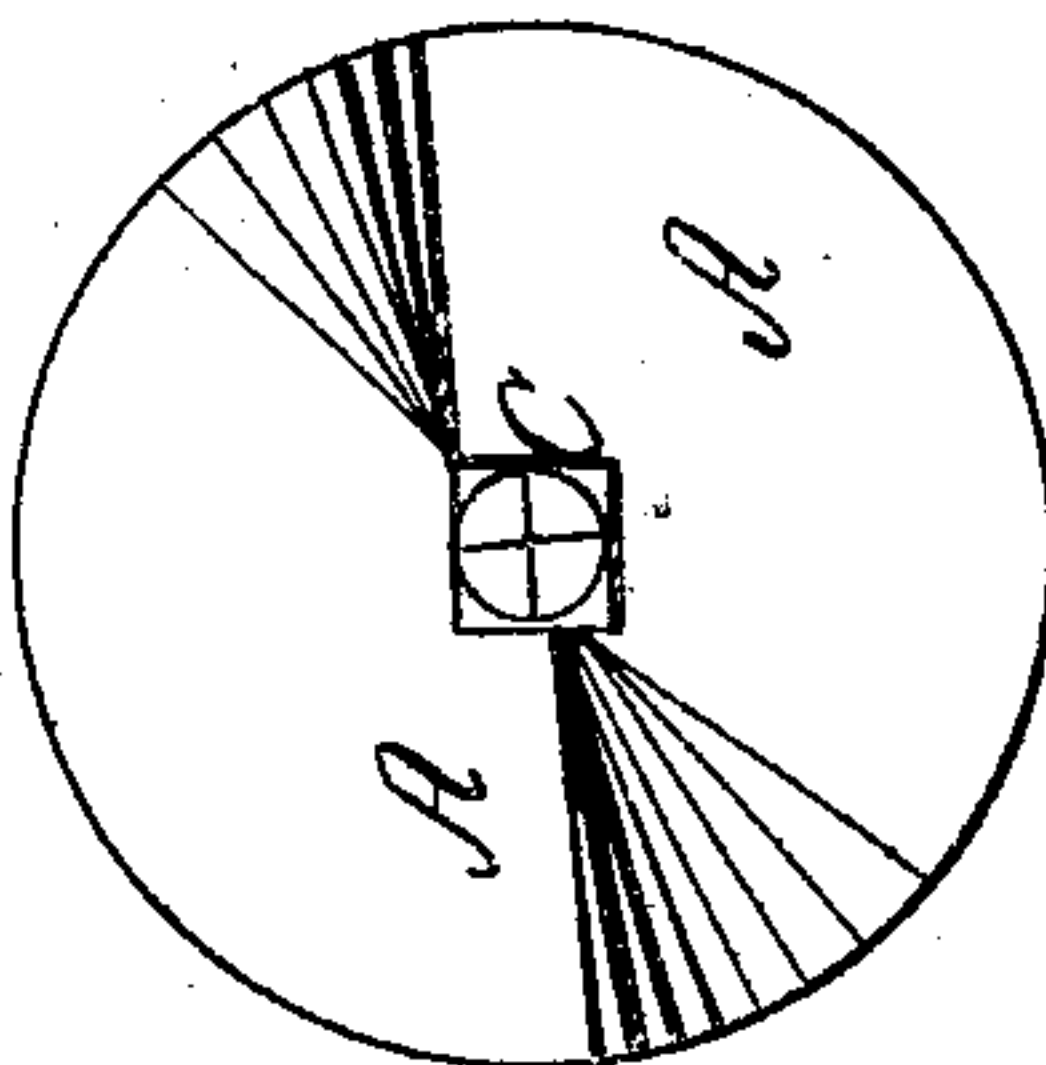
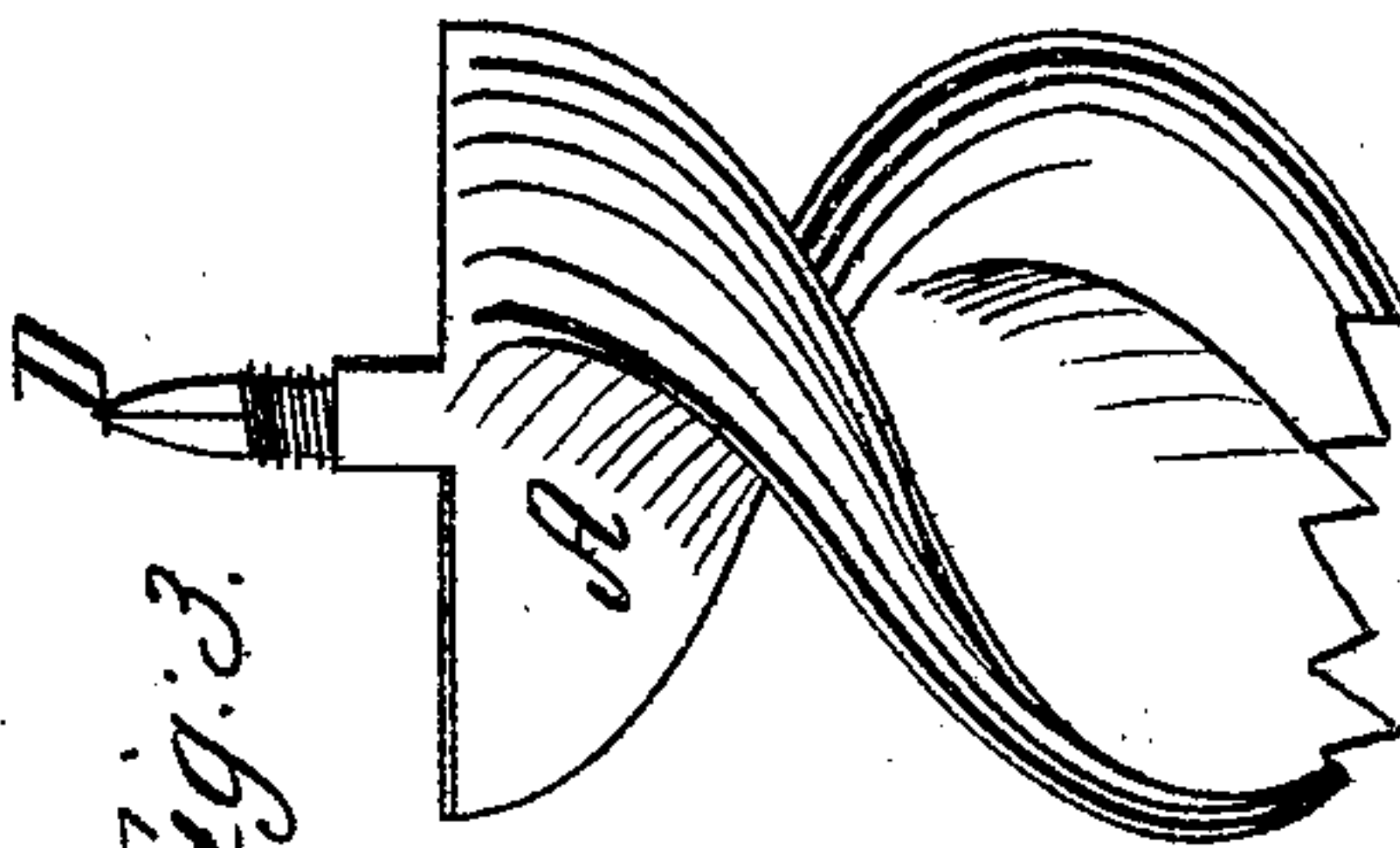


Fig. 3.



Witnesses;
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United States Patent Office.

W. T. HUNTINGTON, OF WASHINGTON, DISTRICT OF COLUMBIA.

Letters Patent No. 85,741, dated January 12, 1869.

EARTH-BORING INSTRUMENT.

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, W. T. HUNTINGTON, of Washington, in the District of Columbia, have invented a new and useful Improvement in Instruments for Boring Artesian Wells, and for Boring Holes in the Earth, and for other purposes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification.

This invention relates to an improved cutting-bit, spur-bit, or grappler, to be applied to common ground-augers; and consists in the construction of said bit in such manner as that the difficulty heretofore arising from the contact of hard clay, hard-pan, and gravel, is avoided, as this bit readily tears up and loosens the same, the joint being at the same time removable for replacement when worn.

This bit or grappler may be forged separately, and secured to the boring-instruments now in use, and replaced as often as the bit becomes so much worn as to require renewal.

In the accompanying sheet of drawings—

Figure 1 represents a plan view of borer with bit attached.

Figure 2 is an end view of the same.

Figure 3 is a vertical view of borer without the bit attached.

Figure 4 is an end view of the same.

Figure 5 represents the grappler detached from borer.

Similar letters of reference indicate corresponding parts.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Bit B is constructed with teeth or grapplers, pointed, as represented in fig. 5, which teeth-points are on a plane with each other, and pointed downwards, with the points so placed on each side of centre-point D as that the points on one side shall not follow in furrow made by the points on the other side.

The borer A is constructed with point D, to receive the bit B, said bit being secured in its position by nut C, shown in fig. 1.

The borer is operated by the usual power applied to all boring-instruments, and when revolving, the points seize hold of, loosen, and tear up the obstructing earth, hard-pan, and gravel.

Having thus fully described my invention,

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

An earth-boring instrument, consisting of the auger A and point B, the point being provided with teeth, and removably attached to the auger, all constructed and arranged to operate as and for the purpose set forth.

Witnesses:

W. T. HUNTINGTON.

J. H. WHITAKER,

H. T. HUTTON.