

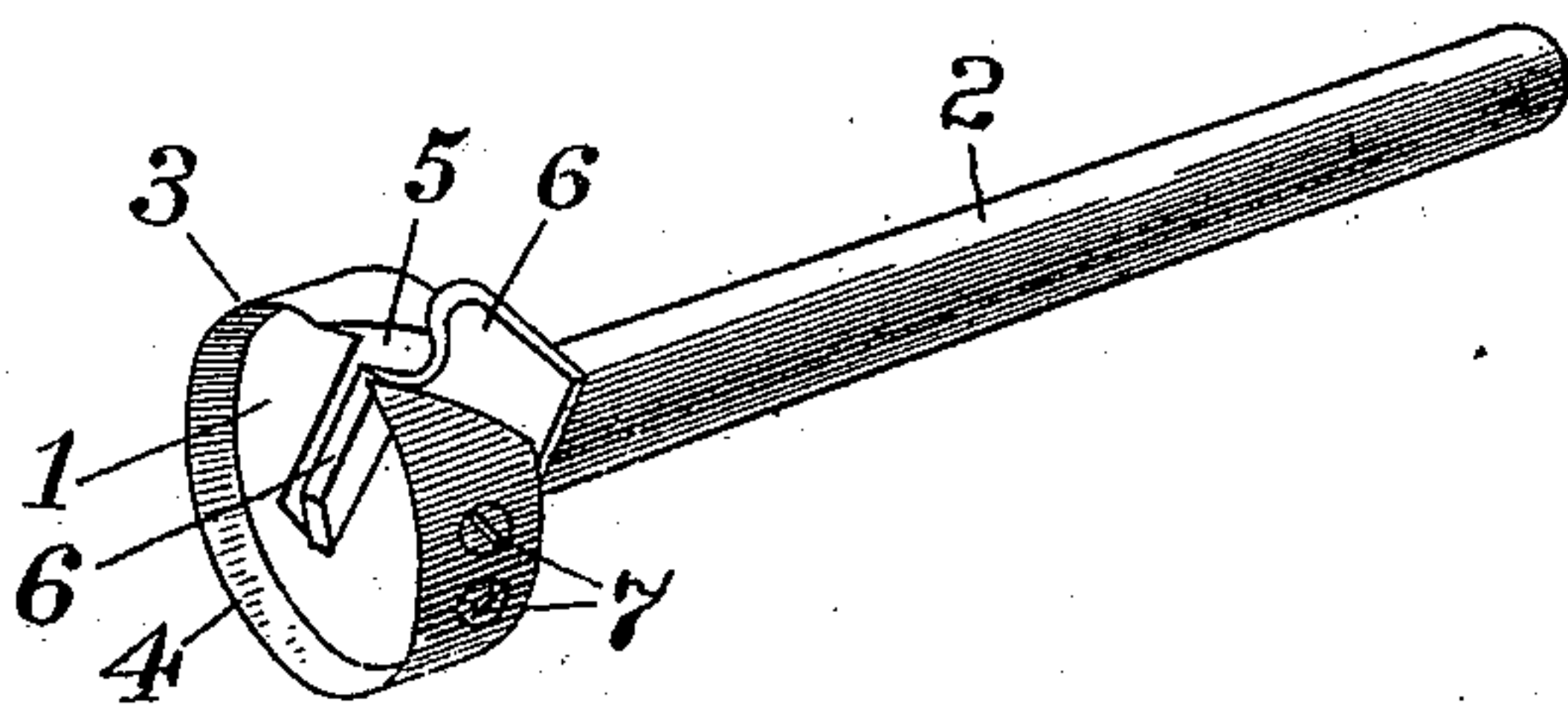
(No Model.)

A. L. ADAMS.  
AUGER BIT.

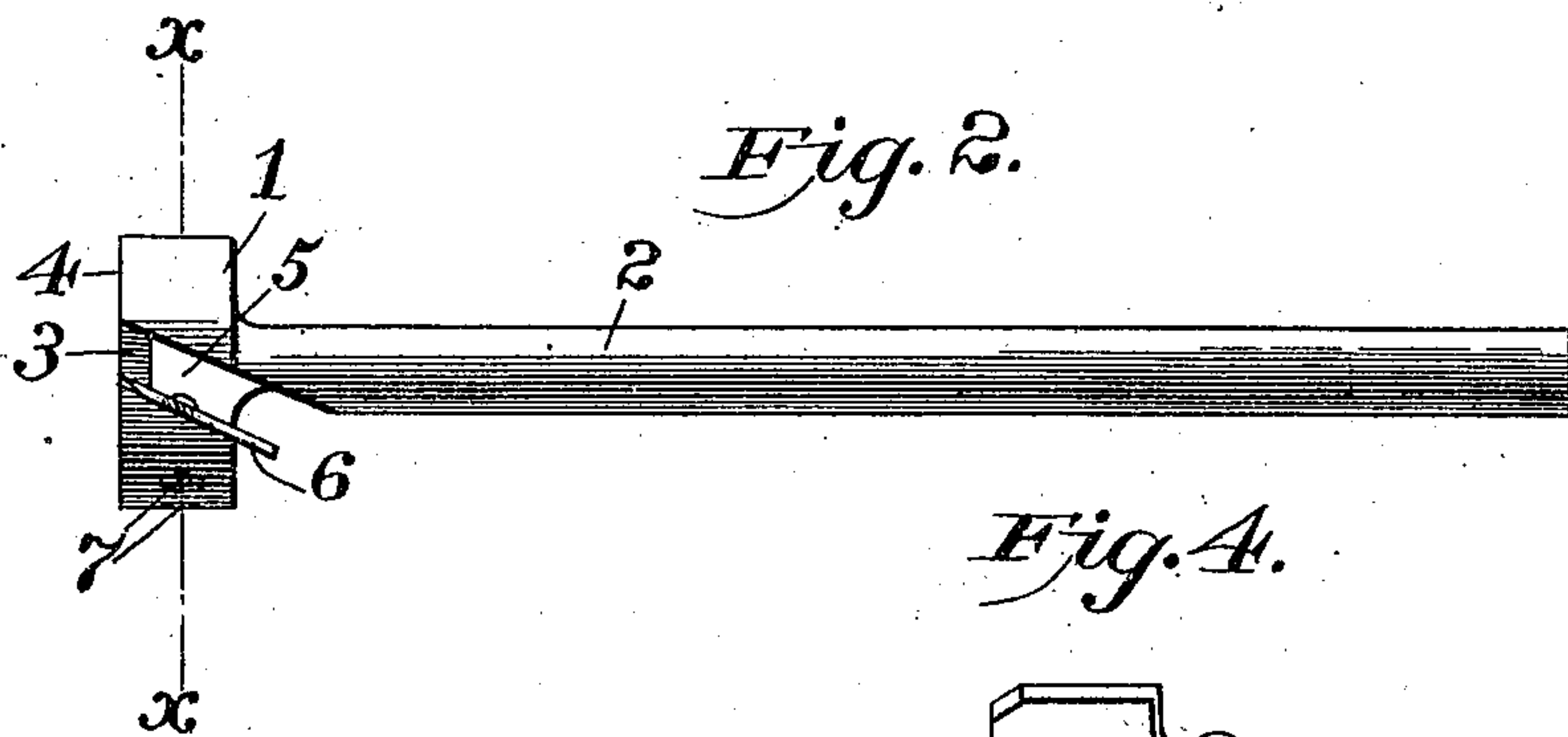
No. 504,261.

Patented Aug. 29, 1893.

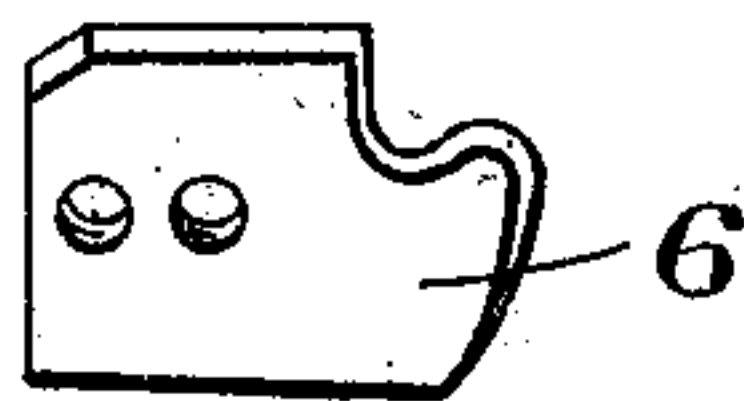
*Fig. 1.*



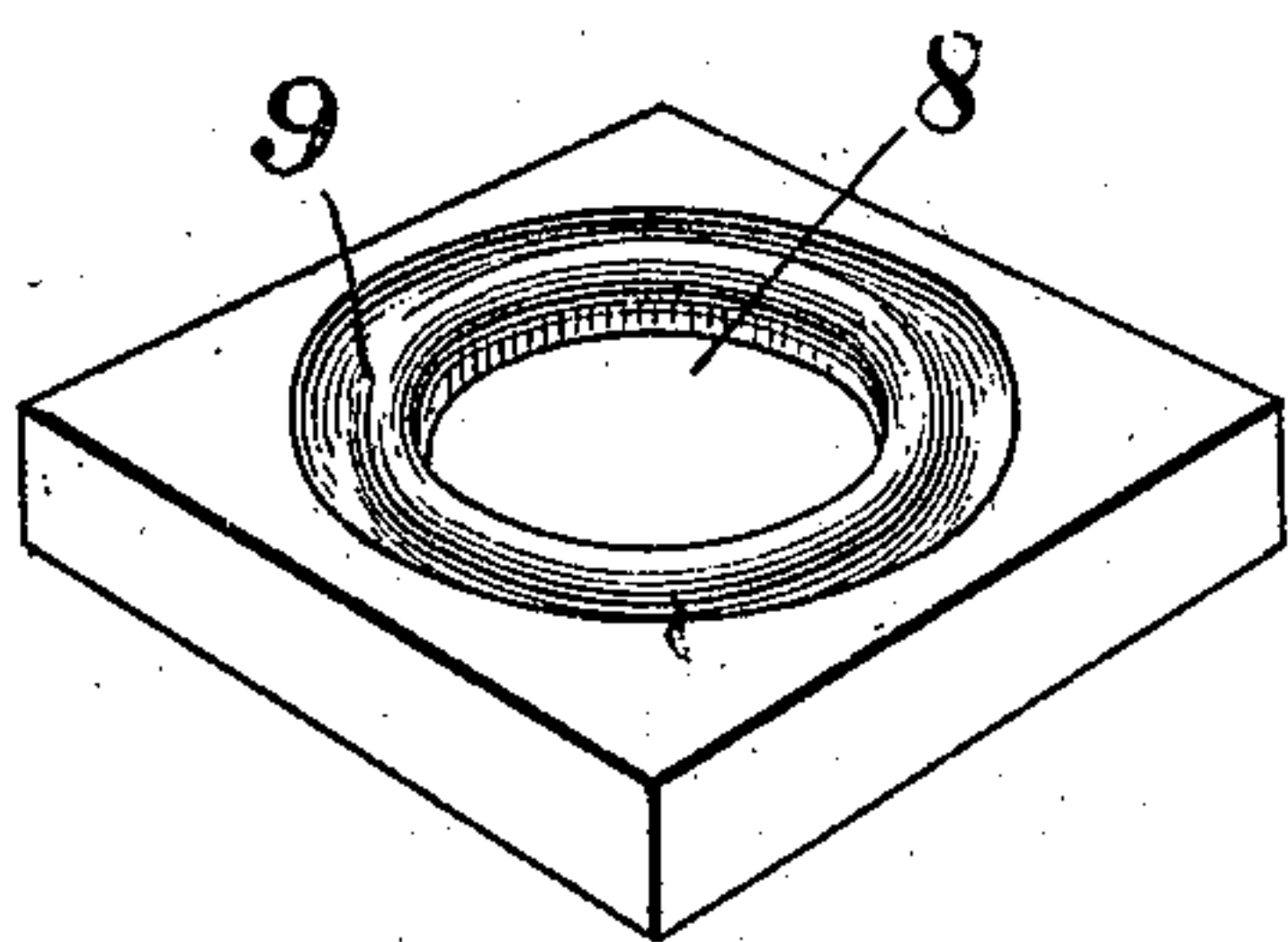
*Fig. 2.*



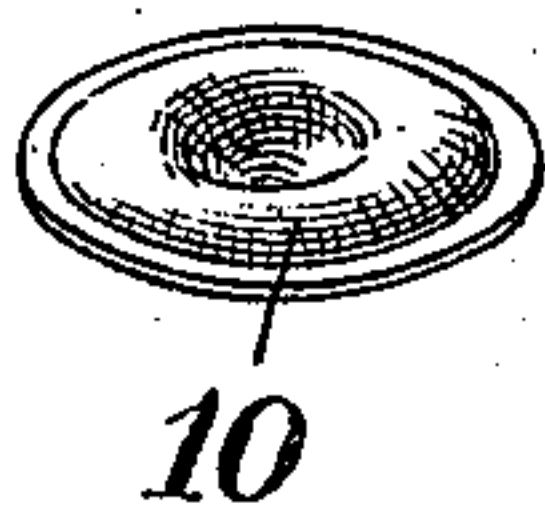
*Fig. 4.*



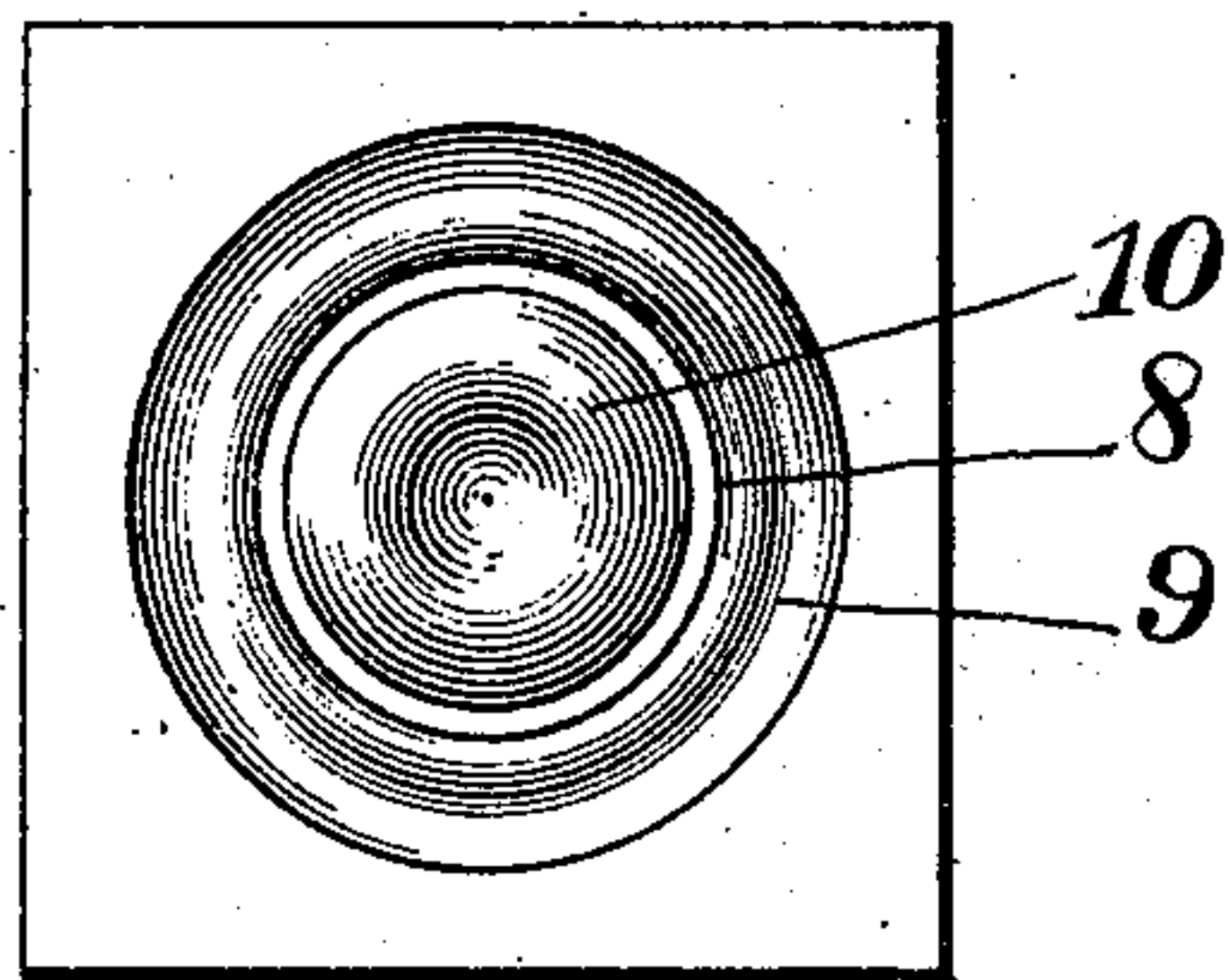
*Fig. 5.*



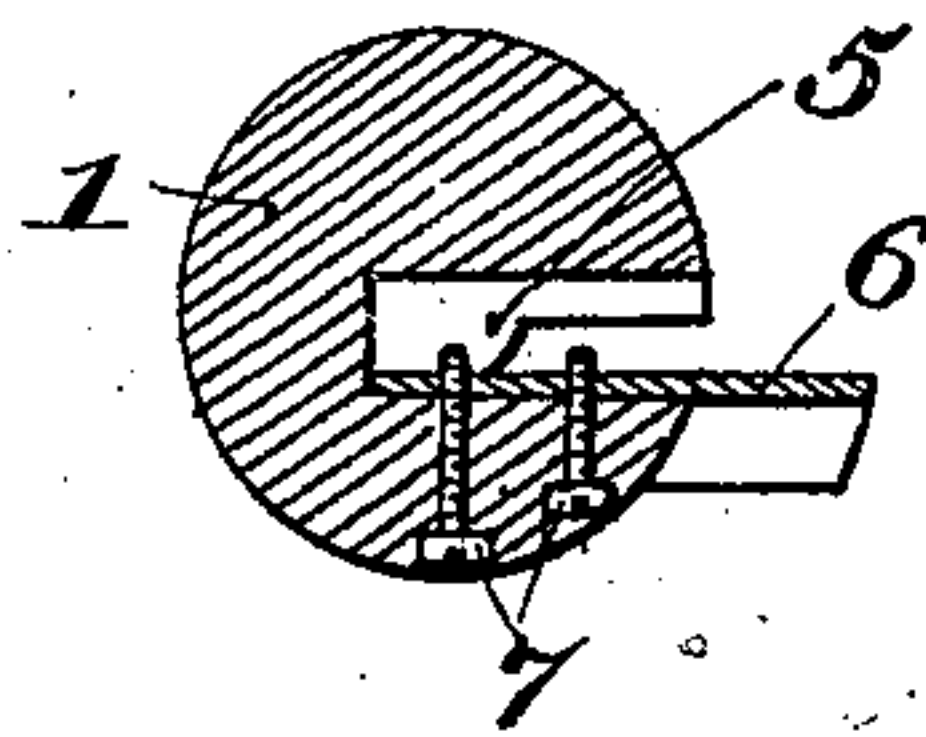
*Fig. 6.*



*Fig. 7.*



*Fig. 3.*



WITNESSES:

*J. F. Finch.*  
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INVENTOR

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ATTORNEY



# UNITED STATES PATENT OFFICE.

ABE L. ADAMS, OF BRIDGEPORT, CONNECTICUT.

## AUGER-BIT.

SPECIFICATION forming part of Letters Patent No. 504,261, dated August 29, 1893.

Application filed May 1, 1893. Serial No. 472,593. (No model.)

*To all whom it may concern:*

Be it known that I, ABE L. ADAMS, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Auger-Bits; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain improvements in auger bits, but has special reference to that class of such devices employing a circular scoring ring to cut out the chips prior to their removal by the cutter.

The object of the present invention is to provide a construction which shall be especially adapted for cutting out rosettes and for forming seats within which they may be located.

In the accompanying drawings—Figure 1, is a perspective of my improvement; Fig. 2, a side elevation thereof; Fig. 3, a section at the line  $x-x$  of Fig. 2; Fig. 4, a detail of the cutter; Fig. 5, a perspective of a rosette-block as it appears when cut out by my improvement; Fig. 6, a perspective of a rosette cut out by my improvement; and Fig. 7, a plan of such block and rosette in proper assembled position.

Similar numbers of reference denote like parts in the several figures of the drawings.

This invention is especially applicable, as hereinbefore stated to auger bits which employ a scoring ring, and in this connection I would state that it is immaterial whether the ring is integral with the head of the bit, or is detachably secured thereto, and since my invention has no reference to any part of such bit save the cutter, I will not herein enter into any details of description except as to the parts immediately identified with my invention.

1 is the head of the bit, 2 the shank extending rearwardly therefrom, and 3 the circumferential ring around the head provided with a cutting edge 4. 5 is a gate which extends through said ring and into said head to a point about midway of the diameter thereof. 6 is the cutter which is secured within said gate to said head by means of screws 7 passed

through the ring and head into the cutter. The edge of this cutter is slightly below the horizontal plane of the cutting edge of the ring, whereby the latter may sever the chips before they are removed by the cutter. This cutter extends through the gate 5 beyond the ring and is conformed as to its edge outside such ring to any desired contour.

In cutting out rosettes, any suitably conformed cutter may be secured to the head 1 inside the ring 3, the latter operating to sever the rosette from the slab of wood after the desired contour has been formed by the cutter. The extension cutter, shown in the drawings is then substituted in the head and a seat for such rosette is cut out, while at the same time a concentric ornamental ring is formed by the action of that part of the cutter which extends outside of the ring.

Referring to Figs. 5 and 6, 8 is the seat for the rosette, 9 the ornamental concentric design around such seat, and 10 the rosette. Of course the rosette and the external ornamentation may be formed at the same time by the continuous operation of a cutter such as is shown in the drawings, and the object in using a separate cutter for the purpose of cutting out the rosettes, is to permit the latter to be formed from wood different in color from the rosette seating.

Prior to the present invention, I showed and described in my pending application for patent, Serial No. 468,095, filed March 29, 1893, a separate cutter secured to the outside of the scoring ring, which cutter was adapted to form the external ornamentation above referred to, but in my present invention I aim to greatly simplify this construction by making the cutter integral as to its extent inside and outside of the ring.

I claim—

1. In an auger bit, the combination of the head having therearound a scoring ring provided with a cutting edge, and having a gate extending through such ring to a point about midway of such head, and a cutter detachably secured within such gate to said head and extending laterally outside said gate beyond the edge of said ring, substantially as set forth.
2. In a device of the character described, the combination of the bit head having a cir-

cumferentially disposed scoring ring and provided with a gate extending through such ring and head to a point about midway of the latter, and a cutter detachably secured to  
5 such head in a plane below the edge of said ring and extending on opposite sides of the latter, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ABE L. ADAMS.

Witnesses:

F. W. SMITH, Jr.,  
A. J. TANNER.