

(No Model.)

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AUGER.

No. 450,908.

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Fig. 1.

Fig. 2.

Fig. 3.

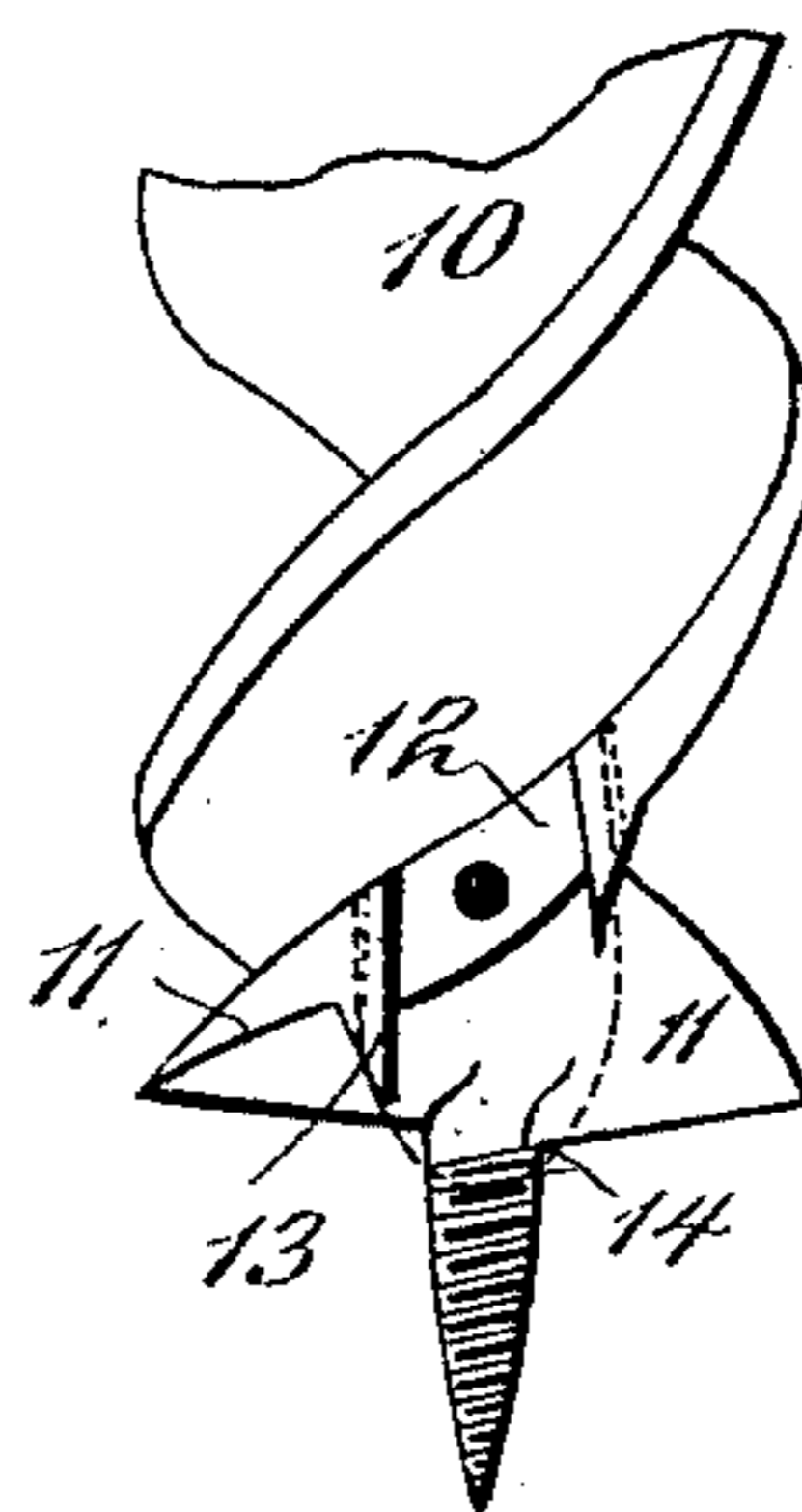
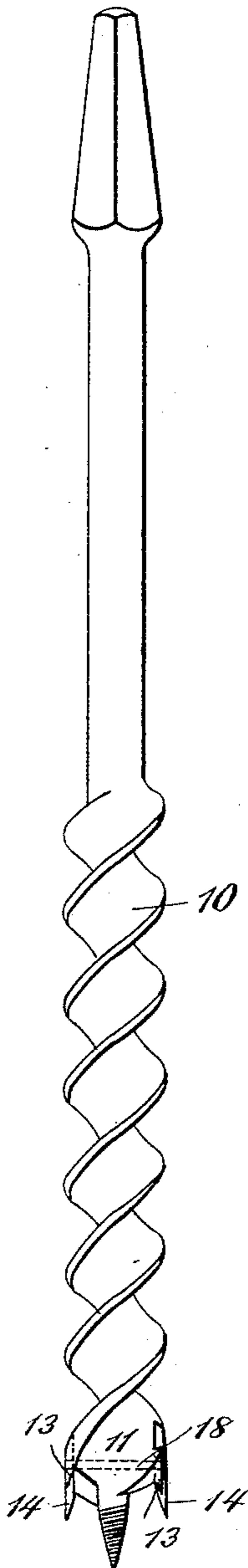
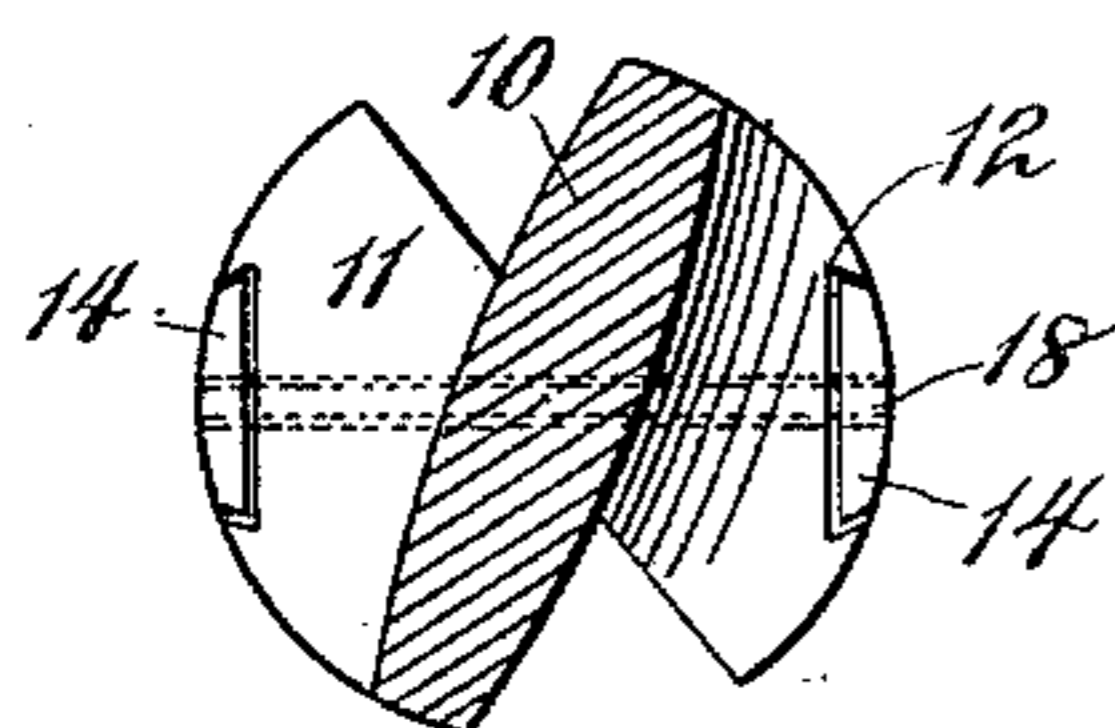
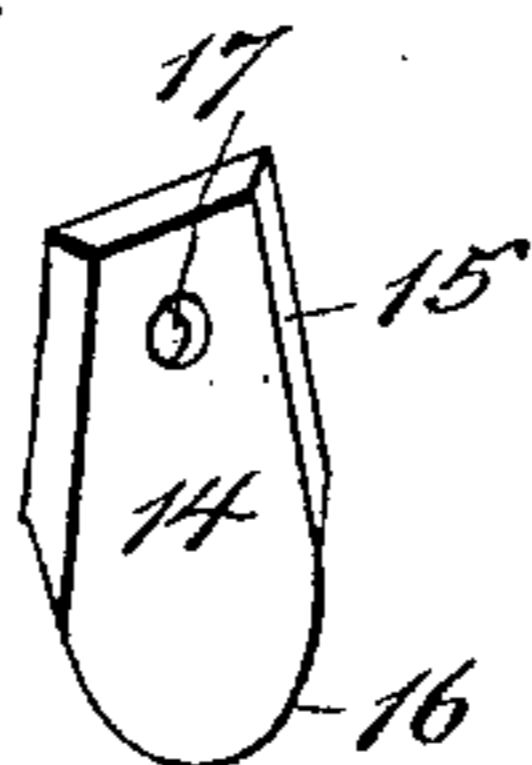


Fig. 4.



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SPECIFICATION forming part of Letters Patent No. 450,908, dated April 21, 1891.

Application filed August 16, 1890. Serial No. 362,172. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM BREDE and LÉON ALBERT DE LA NUX, of Paauhau Mill, Hamakua, Hawaii, have invented a new and useful Improvement in Augers, of which the following is a full, clear, and exact description.

Our invention relates to an improvement in augers, and has for its object to provide a means whereby cutters may be detachably attached to the web of the shank in such manner as to be expeditiously and conveniently applied and removed, the cutters being adapted to define the contour of the hole to be cut, and prevent the web upon entering the wood from tearing the upper surface thereof.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of an auger having the improvement applied. Fig. 2 is a diametrical section through the shank. Fig. 3 is an enlarged partial side elevation of the shank with one cutter removed, and Fig. 4 is a perspective view of the cutter detached.

The twisted shank 10 of the auger is of the usual construction; but in the exterior of the web 11, preferably at opposite sides, dovetail tapering slots 12 are formed, and the metal of the web at each side of each slot is carried downward to form spurs 13, whereby the length of the slots is rendered greater than the regular thickness of the web, as is best illustrated in Fig. 3.

A cutter 14 is adapted to snugly fit into each slot 12, the side edges of which are provided with a bevel 15, the lower cutting-edge 16 being preferably semicircular and beveled downward upon the inner face. The cutters are essentially wedge-shaped or tapering, and are narrower at the top than at the bottom, and in each cutter an aperture 17 is formed near its upper edge, which apertures, when

the cutters are in position upon the auger, register with a diametrical bore in the web. The cutters are held to place by a pin 18, of sufficient length to pass through the bore of the web out flush with the outer face of the cutters, or practically so.

It will be readily observed that the cutters may be expeditiously and conveniently detached and others substituted when occasion may demand, the attachment being effected by driving the pin outward, first in one direction and then in the other when both of the cutters are to be taken out of their sockets. When the pin has been removed, the cutters may be loosened by tapping them slightly upon the top.

It will be further observed that we do not employ threads upon the pin or upon the cutters, all the other surfaces being plain; therefore the parts are not rendered liable to rust or become cemented together.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In an auger, the combination, with the web of the shank, the said web being provided with dovetail recesses in its edges, of cutters adapted to enter said recesses, and a pin passed through the cutters and the web, as and for the purpose specified.

2. In an auger, the combination, with the web of its shank, the said web being provided with dovetail tapering recesses in its edges and downwardly-projecting spurs at each side of the recesses, of cutters provided with beveled edges and an essentially tapering body adapted to fit into the said recesses of the web, and a pin passed through the cutters and the web, as and for the purpose specified.

WILLIAM BREDE.

LÉON ALBERT DE LA NUX.

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