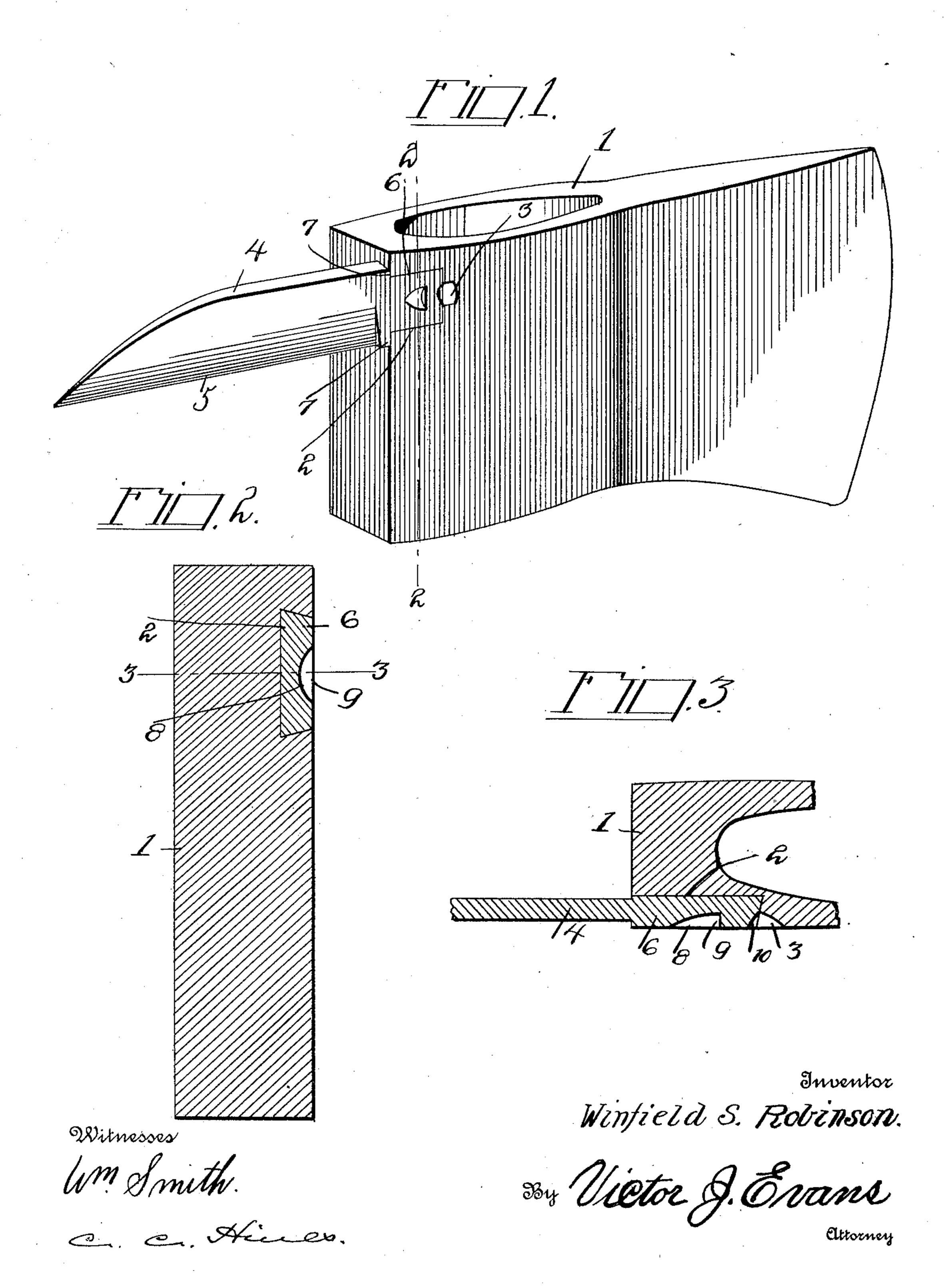
## W. S. ROBINSON.

AX.

APPLICATION FILED NOV. 23, 1909.

997,093.

Patented July 4, 1911.



## UNITED STATES PATENT OFFICE.

WINFIELD S. ROBINSON, OF HARTFORD, MAINE, ASSIGNOR TO DUNN EDGE TOOL COMPANY, OF OAKLAND, MAINE.

AX.

997,093.

Specification of Letters Patent.

Patented July 4, 1911.

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To all whom it may concern:

Be it known that I, Winfield S. Robinson, a citizen of the United States, residing at Hartford, in the county of Oxford and State of Maine, have invented new and useful Improvements in Axes, of which the

following is a specification.

This invention relates to improvements in axes, the object of the invention being to provide a cutter blade attachment for the poll of an ax, whereby the latter may be used for cutting out brush wood, undergrowths etc., said blade being readily adapted for application and removal, the mode of attachment being such as to enable the shank of the blade, in the event that the latter should be broken off, to be detached so that a new blade may be easily substituted therefor.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accom-

panying drawing, in which:-

Figure 1 is a perspective view of an ax head or poll embodying my invention. Fig. 2 is a transverse section on line 2—2 of Fig. 1. Fig. 3 is a longitudinal section on line 2.

line 3—3 of Fig. 2.

Referring to the drawing, 1 designates the head or poll of the ax which is provided in one of its sides with a dovetailed groove 2, preferably arranged near the upper front corner of the right side of the head and opening through the top thereof, the arrangement being of such that when the head is inverted the groove will be disposed adjacent the lower front corner of the left side or face thereof. At the inner end of this groove the said side or face of the head is formed with a beveled or inclined recess 3 intersecting the inner end of said groove.

The attachment comprises a blade 4 having a longitudinal cutting edge 5 and of suitable length and strength for effective use in cutting out thick growth. The blade is provided with a dovetailed tang or shank 6 to fit tightly enough within the groove 2 to prevent possibility of its accidental displacement. At the front of the tang, shoulders 7 are provided to bear against the top of the head and reinforce the blade, and in the outer face of the tang a beveled or inclined recess 8 is formed and presents a shoulder 9 at the inner end thereof. The inner edge

of the outer face of the tang is also provided with a recess to register with the recess 3

and forms a shoulder 10.

In applying the blade the tang is fitted into the groove 2, a punch, nail set or like 60 tool inserted into the recess 8 and against the shoulder 9, and said tool struck a sufficient number of blows by a hammer or other implement to drive the tang home. The blade will thereupon be fixed firmly in position so that by manipulating the ax in a proper manner brush or undergrowth may be cleanly cut out. If the blade should at any time be broken off, a punch or the like may be inserted into the recess and brought 70 to bear against the shoulder 10, and then tapped to force the shank of the groove, whereupon a new blade may be applied.

Attention is called to the fact that the device is especially adapted for use inter- 75 changeably as a mere ax or as a combined ax and brush hook, particularly because of the nature of the joint by which the brush blade is held in place. It will be seen that such blade, while perfectly rigid in use and well 80 adapted to resist all the strains of use, is at the same time readily detachable and again attachable without the use of any special tool, such as a wrench or screw-driver, as the blade may be driven into and out of 85 place by the use merely of a nail or any similar small metal piece which might be hammered with a stone picked up for the occasion. In the use of such incidental instrumentalities the niche 10 in the blade 90 opposite the recess 3 in the head is especially valuable as presenting a surface more readily engaged by any such chance-selected tool and less liable to be battered than would be the plain end edge of the shank 6. 95

Having thus described the invention what

is claimed as new, is:—

An ax head provided in one of its side faces with a longitudinally extending groove opening through the top of the head ad- 100 jacent the front of the head and having undercut side walls, said face formed with a beveled recess extending through the inner end wall of the groove and intersecting said groove, and a cutting blade projecting longitudinally beyond the top of the head and provided at its inner end with a reduced shank to fit within said groove and having shoulders at the opposite sides of the shank to abut against the top of the head, said 110

shank having its side edges beveled to engage the undercut side walls of the groove, whereby the shank is adapted to be engaged with and disengaged from the groove by a relative sliding movement longitudinally of the head, the outer face of the shank being provided with a recess forming a shoulder for engagement with a tapping tool there-

with and with an edge niche to register with said recess in the head.

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

WINFIELD S. ROBINSON.

Witnesses:

ALFRED COLE, W. O. Eustis.

Copies of this patent, may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."