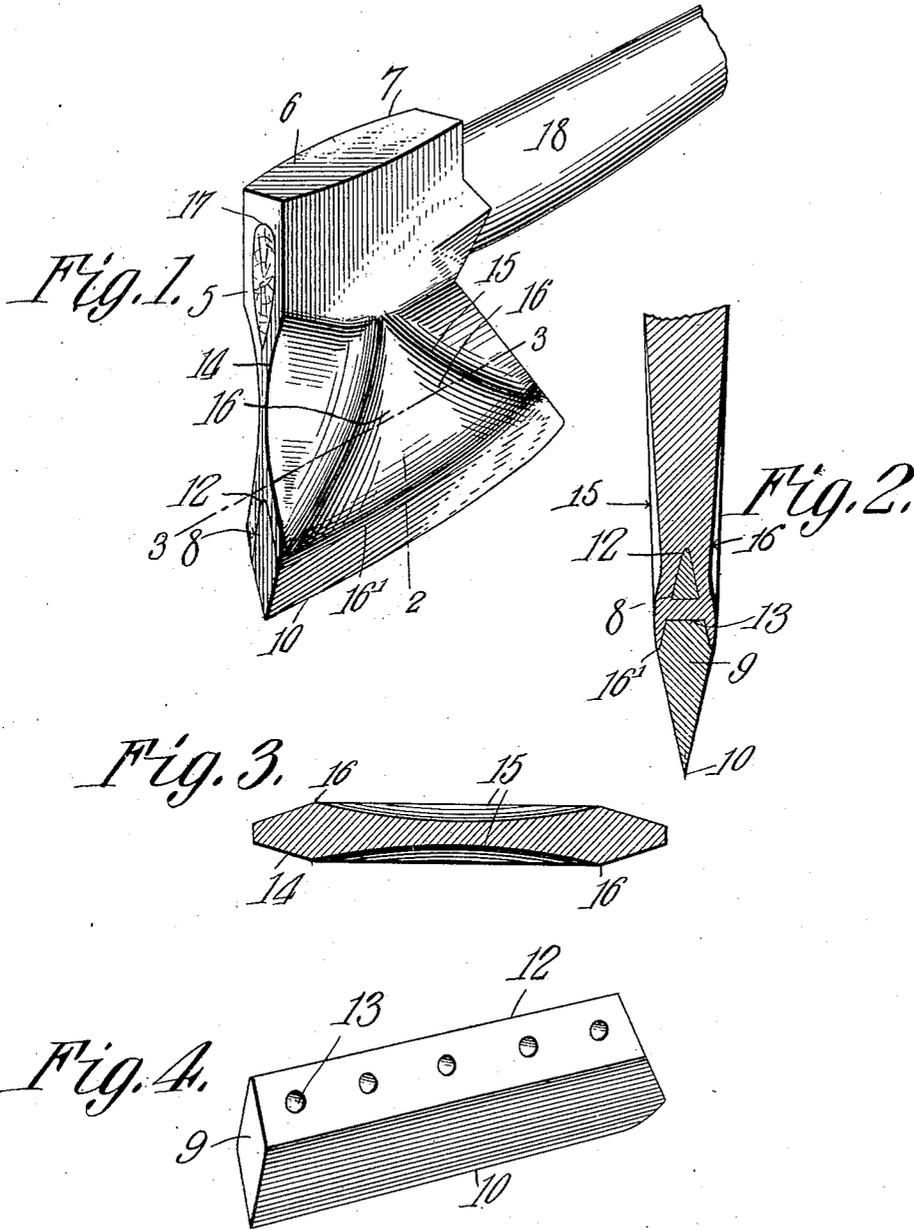


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 AX.
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910,763.

Patented Jan. 26, 1909.



WITNESSES:
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UNITED STATES PATENT OFFICE.

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AX.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HILARY YEATTS, a citizen of the United States, residing at Vernon Hill, in the county of Halifax and State of Virginia, have invented a new and useful Ax, of which the following is a specification.

This invention relates to axes and has for its object to provide a comparatively simple and inexpensive tool of this character which will effectually cut or sever logs, trees or other timber with a minimum expenditure of energy on the part of the operator.

A further object of the invention is to provide a hollow ground ax having a cutting blade or bit the welding edge of which is provided with a row of perforations adapted to receive the metal when the bit is welded to the head or poll of the ax.

A further object is to form the ax with oppositely disposed concaved portions defining inclined ribs or projections which serve to reinforce and strengthen the ax and at the same time prevent the latter from wedging in the timber during the cutting operation.

A still further object of the invention is generally to improve this class of devices so as to increase their utility, durability and efficiency.

Further objects and advantages will appear in the following description, it being understood that various changes in form, proportions and minor details of construction may be resorted to within the scope of the appended claim.

In the accompanying drawings forming a part of this specification: Figure 1 is a perspective view of an ax constructed in accordance with my invention. Fig. 2 is a transverse longitudinal sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1 and looking in the direction of the arrow. Fig. 4 is a perspective view of the bit or cutting blade detached.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved ax forming the subject matter of the present invention consists of a relatively short wide head 5 having a thick poll or butt 6 the edges of which are inclined or beveled at 7 so as to prevent the metal from spreading when driving wedges and the like.

One end of the ax is provided with a termi-

nal V shaped socket or recess 8 for the reception of the cutting blade or bit 9, the latter being provided with a cutting edge 10, and a welding edge 12. The welding edge 12 of the cutting blade or bit 9 conforms to the shape of the interior walls of the socket 8 and is provided with a row of spaced perforations 13 adapted to receive the metal when the bit is welded to the head of the ax, as best shown in Fig. 2 of the drawings.

The opposite longitudinal edges of the ax are concaved or beveled at 14 while the opposite sides of the ax between the inclined portions 14 are provided with substantially triangular shaped concaved portions 15 defining converging reinforcing ribs 16. The ribs 16 are curved inwardly and extend from the opposite corners of the head of the ax to the center of the poll 5 thus serving to reinforce and strengthen the ax and at the same time prevent the latter from wedging in the timber during the cutting operation. The concaved portions 15 also tend to draw or suck the ax in the timber when the latter is driven into the wood while the inclined or beveled edges 14 serve to loosen the chips and free the ax from the timber after each cutting operation.

Attention is here called to the fact that the opposite faces of the ax at the line of juncture of the bit 10 with the adjacent edge of the ax is formed with a ridge the surface of which is curved or rounded as indicated at 16' so as not to offer any obstruction to the passage of the blade through the timber.

The ax is provided with the usual eye for the reception of a handle 18 which may be of any approved construction.

It will thus be seen that the ax is relatively short and thick while the butt end thereof is comparatively heavy or weighted so as to cause the cutting blade to cut or sever the timber with a minimum expenditure of energy or labor on the part of the operator.

The axes may be made in different sizes and shapes and if desired the cutting blades or bits may be formed integral with the body of the ax instead of being made separate and subsequently welded thereto.

From the foregoing description it will be seen that there is provided an extremely simple, inexpensive and efficient device admirably adapted for the attainment of the ends in view.

Having thus described the invention what is claimed is:

An ax including a head having a poll, eye and cutting blade, the opposite sides of the head being provided with a ridge and concaved to produce ribs extending from the opposite ends of the head at said ridge to the front portion of the poll and converging towards the eye of the head, the opposite longitudinal edges of head on both sides thereof

being concaved longitudinally in the direction of the poll and transversely in the direction of said ribs.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

HILARY YEATTS.

Witnesses:

B. E. HEDDERLY,
E. P. DUNN.