(No Model.) 2 Sheets—Sheet 1.

W. J. & J. A. DUNNING.

AX.

No. 356,060. Patented Jan. 11, 1887.

Fig. 1.

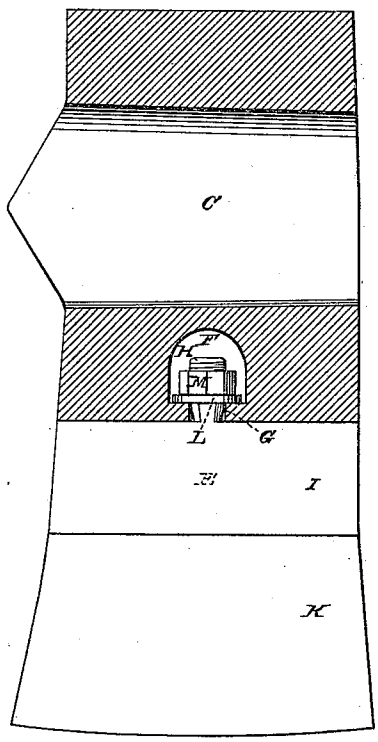


Fig. 2.

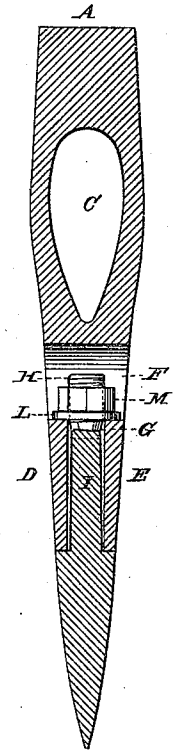


Fig. 3.

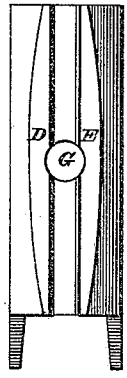
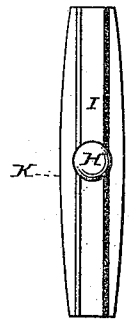


Fig. 4.



WITNESSES

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(No Model.) 2 Sheets—Sheet 2.

W. J. & J. A. DUNNING.

AX.

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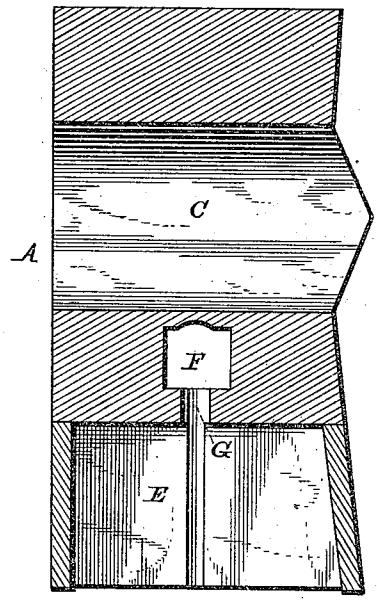
Fig. 5.



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AX.

SPECIFICATION forming part of Letters Patent No. 356,060, dated January 11, 1887.

Application filed September 2, 1886. Serial No. 212,534. (No model.)

To all whom it may concern:

Be it known that we, WILLIE J. DUNNING and JAMES A. DUNNING, citizens of the United States, residents of Aulander, in the county of Bertie and State of North Carolina, have invented certain new and useful Improvements in Axes; and we do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and shows the poll in vertical section. Fig. 2 is a vertical transverse section. Fig. 3 is an edge view of the poll. Fig. 4 is a view of the upper edge of the blade. Fig. 5 is a longitudinal central section of the head or poll with the cutter removed.

Our invention relates to axes; and it consists in the construction and novel combination of parts, as hereinafter described, and pointed out in the claim.

Referring by letter to the accompanying drawings, A designates the head or poll of the ax, which is made separately from the blade B.

The head or poll A is provided below its eye C with two depending parallel flanges, D E, above which, and extending entirely through the ax, is a slot, F, which is intersected by a hole or screw-seat, G, which extends from the lower side of the slot to the recess between the flanges D E. The inner faces of the flanges D E are grooved vertically in line with the screw-seat G, to serve as guides for the screw H on the upper edge of the tongue I of the blade K when introducing the screw H and tongue I to place between the flanges D E. A washer, L, is placed over the screw H after it has been introduced into the screw-seat, and a nut, M, is then turned on said screw, and when turned properly to place locks the blade to the head or poll of the ax.

The head is made, preferably, of cast-iron, owing to the cheapness of that material; but the head may be made of wrought-iron, if preferred. In either event the head will outwear a great number of ax-blades.

One object of this construction is to provide two or more blades for one head, so that should one blade become dulled by use another sharp blade can be immediately substituted therefor, thereby saving the time that would otherwise be lost while sharpening the dulled blade. The dulled blade, after having been removed from the ax-head, may be sent to the grindstone to be sharpened, while the ax-man may continue his labor. Furthermore, blades of different sizes can be secured to the same ax-head, and several blades may be easily carried with the ax-head, so that the laborer need lose no time on account of the ax becoming dulled while he is at work.

We are aware of Patent No. 294,144, in which an ax is formed with a removable cutting-bit, the said bit having a vertical recess intersected by an eye, to receive a pin which fastens a threaded stud or bolt therein, the body of the ax having a transverse aperture crossing a slot, through which the said bolt passes and receives a nut, and therefore do not claim such construction.

Having described this invention, what we claim, and desire to secure by Letters Patent, is—

As an improved article of manufacture, an ax-iron consisting, essentially, of the head A, having the parallel flanges along its lower edge grooved vertically at opposite points, and a central transverse slot above said flanges and the grooves therein, the cutting bit or blade grooved on opposite sides along its back edge, and having a central vertical integral reduced extension, H, threaded at its upper end and adapted to enter the grooves in the flanges of the head, and the washer and nut on the said extension, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

W. J. DUNNING,
J. A. DUNNING.

Witnesses:
JAS. E. MITCHELL,
T. GILLAM, Jr.