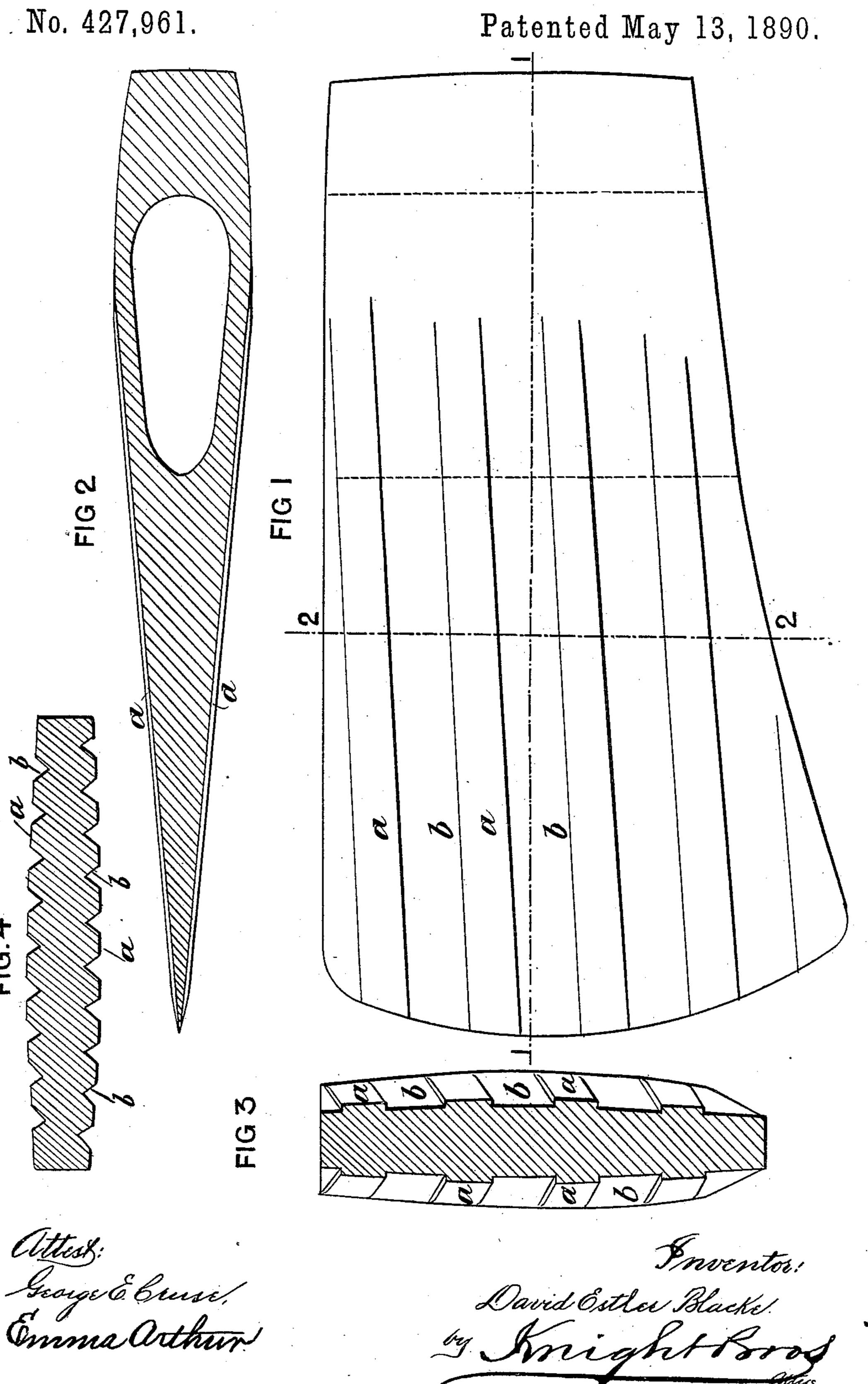
D. E. BLACKE.

AX OR WEDGE FOR SPLITTING WOOD.



United States Patent Office.

DAVID ESTLER BLACKE, OF SYDNEY, NEW SOUTH WALES.

AX OR WEDGE FOR SPLITTING WOOD.

SPECIFICATION forming part of Letters Patent No. 427,961, dated May 13, 1890.

Application filed November 26, 1889. Serial No. 331,704. (No model.) Patented in New South Wales August 3, 1887, No. 73, and in Queensland May 18, 1888, No. 471.

To all whom it may concern:

Be it known that I, DAVID ESTLER BLACKE, accountant, a subject of the Queen of Great Britain, residing at Sydney, in the Colony of New South Wales, Australia, have invented certain new and useful Improvements in Axes or Wedges for Splitting Wood, (for which I have obtained Letters Patent in Queensland, dated May 18, 1888, No. 471, and New South Wales, dated August 3, 1887, No. 73;) and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

In constructing axes or wedges for split-

ting wood they are according to the present invention formed with a series of ribs on each side, forming shallow grooves between said ribs. The tops of the ribs and the bottoms of the grooves are parallel throughout, excepting at the extreme ends of the ribs, and may be formed with flat faces, or they may be in the form of corrugations or in the form of V-grooves between the ribs. By this construction the ax or wedge is made much more effective in wedging the wood open as it is being split by lessening the friction and the tendency to wedge fast in the wood, as is the case with ordinary axes and wedges for splitting wood. This form of ax or wedge, with ribs and grooves

or corrugations on its sides, is applicable both to machine axes and to axes for hand use, as also to wedges for splitting wood. In order that my said invention may be more clearly understood and readily carried

into effect, I will proceed, aided by the ac-

companying drawings, more fully to describe the same.

In the drawings, Figure 1 is a side view of an ax-head constructed according to my invention. Fig. 2 is a longitudinal section drawn on the line 1 1 of Fig. 1; and Fig. 3 is a cross-section drawn on the line 2 2 of Fig.

1; and Fig. 4 is a cross-section showing a modification.

The ax-head may be of any known form; but according to my invention I form the sides thereof with ribs a a, extending from about midway of the socket clear to the cutting-edge, and between which are shallow 50 grooves b b, parallel with the ribs throughout substantially. In the drawings these ribs and grooves are shown with flat faces; but it will be readily understood that they may be in the form of corrugations or of V-grooves bestween flat-faced ribs, as represented at Fig. 4. The height of the ribs is gradually reduced to the edge of the axe to enable the same to be readily ground to a sharp edge.

The ax-heads shown in the drawings are 60 formed for axes for hand use; but the invention is also applicable to other forms of axes for either hand or machine use, as also to wedges for splitting wood.

I would here remark that I do not confine 65 myself to the forms or dimensions of the grooves, as such may be varied without departing from the nature of my invention.

Having fully described my invention, what I desire to claim and secure by Letters Pat- 70 ent is—

1. An ax or wedge constructed with ribs and grooves on the sides thereof, said ribs extending from about midway of the socket to the cutting-edge, substantially as set forth.

2. An ax or wedge constructed with ribs and grooves on the sides thereof, the tops of said ribs and the bottoms of said grooves being parallel throughout their length, excepting at the cutting-edge, where the ribs grad-80 ually merge thereinto, substantially as set forth.

DAVID ESTLER BLACKE.

Witnesses:

JAS. JOHNSTON, I. CROSBIE.