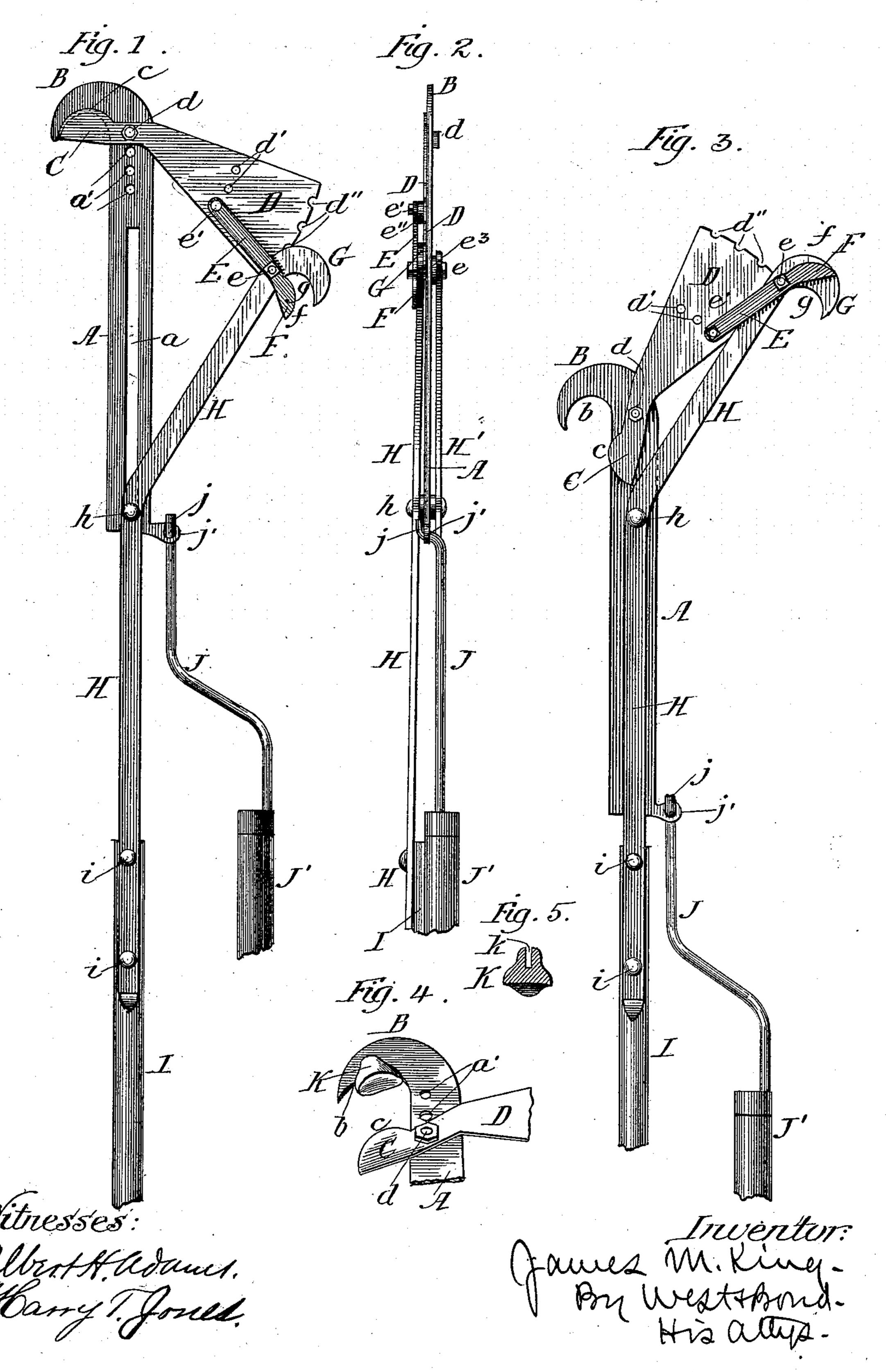
## J. M. KING.

## PRUNING HOOK.

No. 370,704. Patented Sept. 27, 1887.



## United States Patent Office.

JAMES M. KING, OF HEBRON, NEBRASKA, ASSIGNOR TO HIMSELF AND JACOB C. HELFRICH, OF SAME PLACE.

## PRUNING-HOOK.

SPECIFICATION forming part of Letters Patent No. 370,704, dated September 27, 1887.

Application filed April 26, 18e7. Serial No. 236,251. (No model.)

To all whom it may concern:

Beit known that I, James M. King, residing at Hebron, in the county of Thayer and State of Nebraska, and a citizen of the United States, have invented a new and useful Improvement in Pruning-Hooks, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation showing the hook and knife closed; Fig. 2, an edge view of the parts in the position shown in Fig. 1; Fig. 3, a side elevation showing the hook and its knife opened. The handles in Figs. 1, 2, and 3 are broken off. Fig. 4 is a detail showing the hook and knife with the guard-block on the hook; Fig. 5, a detail in section of the guard-block.

The object of this invention is to construct a pruning-hook which can be used for cutting and laying a hedge, or for trimming a hedge, or trimming and cutting off small limbs, or for any other use for which a pruning-hook is desired, and which can be changed or adjusted as the knife wears away, and be used until the knife is entirely worn out, and also to improve the construction and operation of the several parts which enter into the construction of the instrument as a whole; and its nature consists in the several parts and combinations of parts hereinafter described, and pointed out in the claims as new.

In the drawings, A represents a plate, of steel or other suitable material, having a longitudinal slot, a, and provided at its outer end with a series of holes, a'; B, a hook formed 35 with the plate A, and having on its inner face a cutting-edge, b; C, a knife to coact with the hook B, and having a cutting edge, c, to coact with the cutting-edge b; D, a plate carrying the knife C, which, as shown, is formed there-40 with, and this plate D is connected with the plate A by a pin or pivot, d, passing through that one of the adjusting-holes a' required to set the knife C in proper relation with the hook B for the cutting to be done, and for this 45 purpose the pin or pivot d is a removable one; E, a plate, the inner end of which receives a pin or pivot, e', which passes through that one of a series of holes, d', in the plate D that will adjust the plate E properly for the operation of 50 the knife which it carries; F, a knife formed

with the plate E and having a cutting edge, f; G, a hook having a cutting-edge, g, to coact with the cutting-edge of the knife F, and, as shown, the knife and hook are held in proper relation, and also connected with the 55 plate D by a removable pin or pivot, e, the body of which enters notches d'', formed in the edge of the end of the plate D; H, a bar carrying the hook G, which, as shown, is formed therewith. This bar has one portion which, 6c when the parts are together, lies parallel with the plate A, and the portion which carries the hook G stands at an angle to the plate A, as shown in Figs. 1 and 3; and a bar, H', corresponding to the bar H, except that it has no 65. hook, is provided to support and guide the end of the plate D having the notches d''. The outer ends of the bars H H' are connected with the end of the plate D by the pin or bolt e, and the bars H H' are connected 70 with the plate A by a bolt or pin, h, the body of which lies in the slot a. I is a handle, to which the bars H are attached by rivets or pins i; J, a rod, bent as shown in Figs. 1 and 2, and attached at one end to a handle, J', and the 75 other end has a hook portion, j, which connects with an ear, j', on the plate A, the hook j, as shown, being one which can be readily inserted into or detached from the ear, so as to make the rod and handle removable; K, a 80 guard-block having a slot, k, corresponding in width to the thickness of the hook B, to which hook the guard-block is attached by entering the hook in the slot k. The face of the block K is rounded out so as to approximately cor- 85 respond to the curvature of limbs, and this block forms a guard against abrasion of the bark or injury to the hedge when the knife C is used for the purpose of only partly cutting the hedge as required in laying.

The operation of laying a hedge is as follows:
The hook B is prevented from cutting by applying the guard-block K to its edge, as shown in Fig. 4. The operator takes hold of the handle I with his right hand, grasping the 95 handle J' with his left, and when the parts are in the position shown in Fig. 3 the hook B is caught around the trunk or a limb of the bush to be laid and the operator draws back on the handle I, which causes the knife C to be ad-

vanced and partly sever the caught portion, after which the knife is released by pulling back on the handle J' or advancing the handle I, one handle or the other being held firmly, 5 thus releasing the instrument from the trunk or limb that has been acted upon and bringing the parts into the position shown in Fig. 3, ready for the next cutting operation, and at the same time the parts are in position for 10 the trunk or limb that has been partly severed to be caught between the notched edge of the plate D and the convex edge of the hook G for the operator to lay the cut portion, by 15 I, and in laying the cut portion is to be caught as usual in laying hedges. The instrument is used for wholly severing trunks or limbs by removing the guard-block K from the hook B and catching the hook around the trunk or 20 limb to be severed, and then drawing back on the handle I, which advances the knife C, and through the cutting edges b c of the hook and knife severs or cuts completely off the trunk or limb. The instrument is to be used for 25 cutting off small limbs or twigs, as in trimming, by placing the instrument in position for the limb or twig to be cut off to enter between the knife F and hook G when the parts are in the position shown in Fig. 1, when, by 30 drawing back on the handle J' or advancing the handle I, the cutting-edges fg of the blade and hook will act and sever the limb or twig. The knife C, as it wears away, can be adjusted in proper relation to the hook B by withdraw-35 ing the pin or pivot d and setting the knife higher up and reinserting the pin in that one of the holes a' which brings the knife and hook in proper relation, and by means of these holes a' the knife C and hook B can be adjusted in 40 proper relation to each other for cutting trunks or limbs of a greater or less diameter. The knife F and hook G can be maintained in proper cutting relation as the knife wears away by the adjusting-holes d' and notches d'', which 45 holes and notches, through the pins or pivots e and e', enable the knife to be reset in its relation to the hook as it becomes worn. As shown, a washer, e'', is located around the pin e', between the end of the plate E and the face 5c of the plate D, so as to maintain the plate E in proper relation to the plate D, and, as shown, a washer, e3, is located around the pin or pivot e, between the end of the bar H' and the face

of the plate D at the end, to hold the end of the bar H' parallel with the plate D.

The construction of the instrument is one that enables either handle I or J' to be used in applying the power for cutting purposes, the other handle being meanwhile held rigid, as when the hook B and knife C are to be used the 60 hook can be caught around the trunk or limb and the handle I be drawn back, which will advance the knife; or the handle J' can be pushed forward or advanced, which will likewise advance the knife, but not with the same power 65 as with the handle I, for the reason that the pushing on the instrument through the handle | handle I operates the knife through the bent bars H, and these bars are connected to the outer end of the plate D, which carries the knife, giving the knife the advantage of this 70 leverage in the cutting operation. When the knife F and hook G are to be used, the operator can draw back on the handle J' or advance the handle I to do the cutting, meanwhile holding the other handle fixed.

What I claim as new, and desire to secure by

Letters Patent, is—

1. The slotted plate A and hook B, in combination with the knife C, plate D, bars H H', moving on and guided by the slotted plate A, 80 the handle I, rod J, and handle J', for operating the knife C, substantially as specified.

2. The guard-block K, in combination with a cutting-hook and a cutting-blade for rendering the hook non-acting when cutting and prevent- 85 ing abrasion or injury therefrom in use, sub-

stantially as specified.

3. The plate A, plate D, plate E, and knife F, in combination with the hook G, bar H, rod J, and handles I J', substantially as and for 90 the purpose specified.

4. The plate A and plate D, having the pivot d and adjusting-holes d' d', in combination with the plate E, knife F, bar H, and hook G, for adjusting the knife F as it becomes worn, substantially as and for the purposes specified.

5. The slotted plate A, hook B, knife C, and plate D, in combination with the plate E, knife F, hook G, bars H H', handle I, rod J, and handle J', all constructed and arranged sub- 100 stantially as and for the purpose specified.

JAMES M. KING.

Witnesses:

CONOWAY LEEDOM, C. M. Weiss.