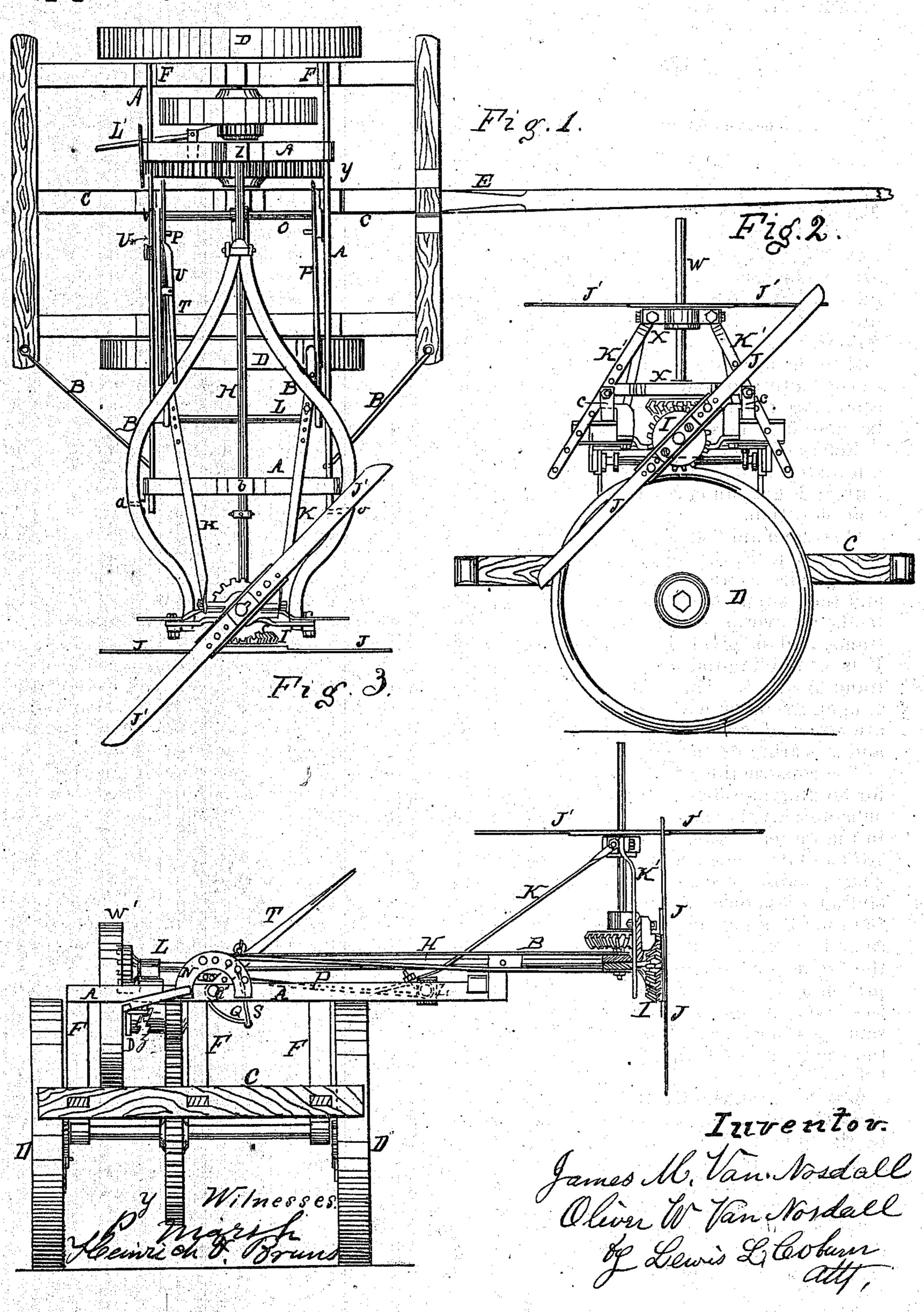
J.M. M. Van Nosdall. Heage Trimmer: Nº 1/2300 Patented Feb. 28, 1871.



UNITED STATES PATENT OFFICE.

JAMES M. VANNOSDALL AND OLIVER W. VANNOSDALL, OF NEWARK, ILL.

IMPROVEMENT IN HEDGE-TRIMMERS.

Specification forming part of Letters Patent No. **I12,300**, dated February 28, 1871; antedated February 18, 1871.

To all whom it may concern:

Be it known that we, James M. Vannos-Dall and Oliver W. Vannosdall, of Newark, in the county of Kendall and State of Illinois, have invented a new and useful Improvement in Hedge-Trimmers, of which the following is a specification, reference being had to the accompanying drawing.

The nature of our invention consists in a combination and arrangement of parts, as will

be more fully hereinafter specified.

Referring to the drawing, Figure 1 represents a top or plan view of our improved hedge-cutter; Fig. 2, an end elevation, and Fig. 3 a rear elevation.

C is the main frame of the machine; D, the wheels; and E, the tongue, to which the draft is applied. F are uprights from the frame C, and they support another frame, A, that extends out over one of the wheels. B is also a frame, and is pivoted to the frame A at a a. H is a tumbling-rod, having bearings on the frame A at b b. This rod has a bevel-wheel, I, upon its outer end, to which the knives J are attached, and it also has a universal joint and a bearing on the pivoted frame A.

The construction of the gearing and frames for holding and driving the cutting-knives is substantially the same as shown and described in the Letters Patent issued to us January 25, 1870. But by connecting the braces K to a sliding cross-piece, L, and connecting that sliding cross-piece with the rock-shaft O by the rods P, a new device is used, whereby the same lever that turns the rock-shaft and tilts the frame B also slides the cross-piece L, and prevents the frame X from being tilted with the frame B, and keeps the knives J' in the same position, regardless of the inclination of the front knives J, that trim the sides of the hedge.

Q is an arm, rigidly attached to the rock-shaft O, and is also connected to the frame B by the link S. T is a lever, by which the operator turns the rock-shaft O, and it is held in any desired position by the spring-pin U, projecting through the holes in the piece V.

The operator, by grasping the lever T and throwing back the pin U, can turn the rock-shaft O, and thereby tilt the frame B on its

pivots a a till the knives J stand at any desired angle for trimming the side of the hedge; but the same operation that tilts the frame B also slides the cross-piece L on the frame A, and keeps the shaft W, that carries the knives J', in the same vertical position.

The frame X, that holds the shaft W, is

pivoted to the frame B at c c.

The braces K and K', that brace the frame X, have various holes in them, as shown, for the purpose of allowing the frame X to be adjusted to different heights, or inclined from a perpendicular position, as may be desired.

If it is desired to trim the top of a very low hedge, the frame X is removed from the frame B, inverted, and attached beneath the frame, the braces K and K' being connected the same, but extending up instead of down, and the bevel-wheel that drives the shaft W engaging with the wheel I from beneath instead of from above, as shown.

By extending the frame A out over the wheel the frame B can be pivoted thereto nearer the knives, and, being held and operated at the long end from the pivots, is held

much firmer and operated easier.

Y is a drive-wheel, firmly secured to the axle of the machine, and engages with the cog-wheel Z on the same shaft with the wheel W. The wheel Z is placed loosely on the shaft, and the wheel W' is so placed on the shaft as to slide laterally but not revolve thereon.

L' is a lever for sliding the wheel W' on its shaft to throw the machine in or out of gear.

B' are braces, bracing the frame A to the frame C.

Having described the construction and operation of our improved machine, what we claim, and desire to secure by Letters Patent,

Q is an arm, rigidly attached to the rockaft O, and is also connected to the frame B with the rock-shaft O and cross-piece L, substantially as and for the purpose specified.

> JAMES M. VANNOSDALL. OLIVER W. VANNOSDALL.

Witnesses:

C. D. CLEVELAND, ISAAC LOTT.