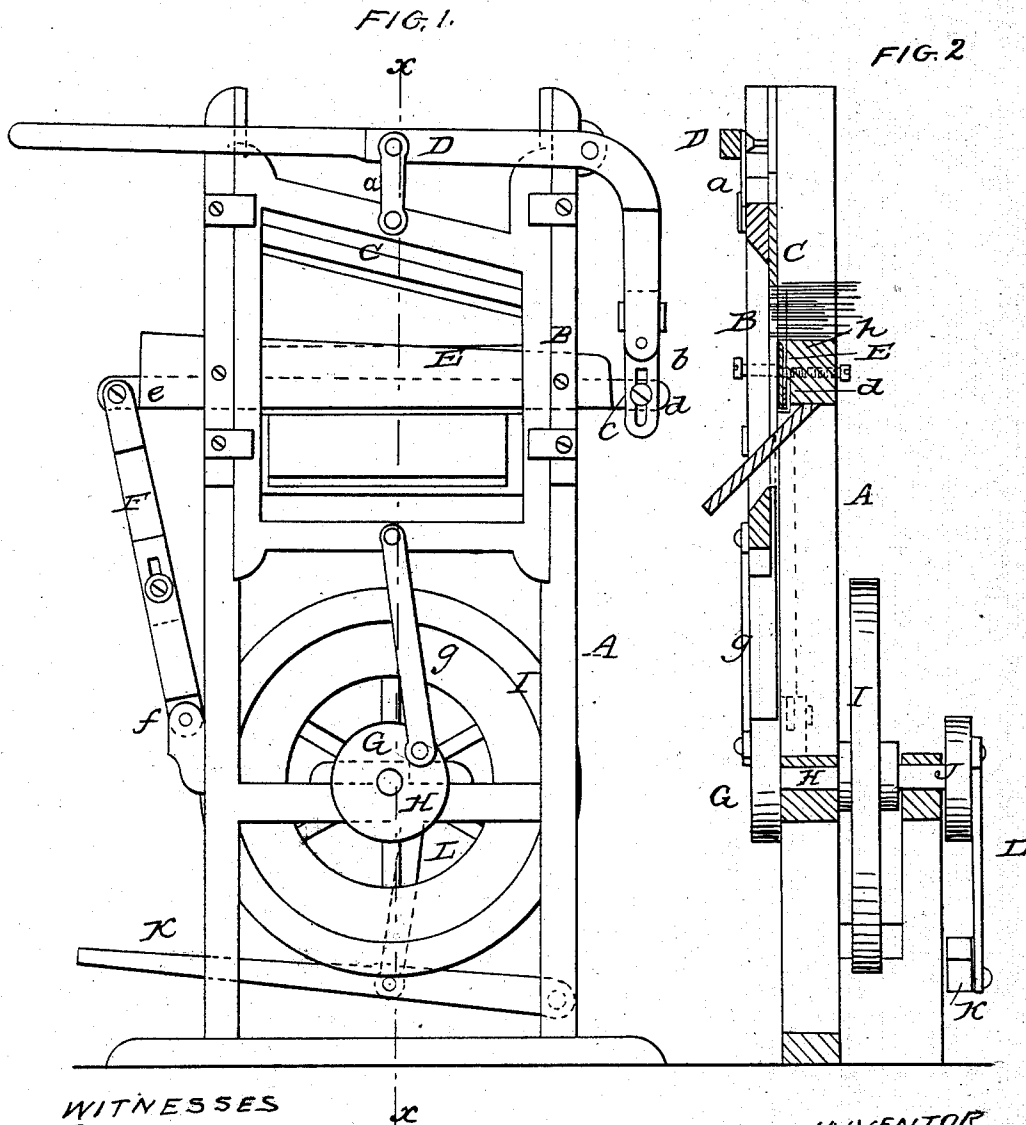


N. HOMES.

Straw and Root Cutter.

No. 26,676.

Patented Jan'y 3, 1860.



WITNESSES
Roswell Butler
H. L. Graves.

INVENTOR
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UNITED STATES PATENT OFFICE.

N. HOMES, OF LAONA, NEW YORK.

STRAW-CUTTER.

Specification of Letters Patent No. 26,676, dated January 3, 1860.

To all whom it may concern:

Be it known that I, N. HOMES, of Laona, in the county of Chautauqua and State of New York, have invented a new and improved Machine for Cutting Straw, Roots, Stalks, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a front view of my invention. Fig. 2, is a transverse vertical section of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in combining with an ordinary reciprocating knife and gate, a lever knife arranged to operate conjointly with the upper knife substantially as hereinafter described for the purpose of facilitating the cutting operation.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, represents an upright framing in which a vertically reciprocating knife gate B is placed and allowed to work freely up and down. This knife gate has a knife C, fitted obliquely in it, as shown clearly in Fig. 1. The upper end of the knife gate B, has a hand lever D, connected to it by a link *a*. One end of the lever D, is curved downward and has a slotted plate *b*, attached to its lower end, said plate *b*, having secured to it by a screw or bolt *c*, one end of a bar *d*, to which a knife E, is attached, the opposite end of said bar being secured by a screw or bolt *e*, to a bar F, the lower end of which is connected by a joint *f*, to one side of the framing A, as shown clearly in Fig. 1. The bar F, may be formed of two parts connected by a slide joint and bolt so as to admit of the bar being extended from time to

time to compensate for the wear of the knife E. The lower part of the knife gate B, is connected by a pitman *g*, to a crank pulley G, which is placed on a shaft H, having a fly wheel I, on it and also another crank pulley J, to which a treadle K, is connected by a pitman L.

The framing A, is placed directly in front of a proper feed box, the two knives C, E, working over its mouth and the basils of the two knives are formed at opposite sides so that the cutting edges will work over each other in contact and produce a clean cut, the substance to be cut, shown in red being fed between the knives by any proper means.

The knife C, it will be seen has a vertical movement and the knife E, a horizontal drawing and upward cut, power being applied by means of the lever D, and treadle K.

It will be seen from the above description that the two knives will cut with far greater facility than the usual vertical reciprocating knife C, alone and it will also be seen by connecting the fly wheel and treadle to the knife gate B, the power of the operator may be applied to the machine in a very advantageous manner. The cost of the supplemental knife E, is not great, in fact inappreciable when compared with the advantages obtained by it.

The bar *d*, and knife E, work in slots *h*, in the uprights of the framing A.

I do not claim separately any of the within described parts, but,

I do claim as new and desire to secure by Letters Patent,

The combination of the two knives C, E, arranged to operate substantially as and for the purpose set forth.

N. HOMES.

Witnesses:

ROSSELL BUTLER,
ALONZO L. GRAVES.