(Model.)

2 Sheets—Sheet 1.

E. WAGONER.

FODDER CUTTER.

No. 264,800. Patented Sept. 19, 1882.

Fig. 2.

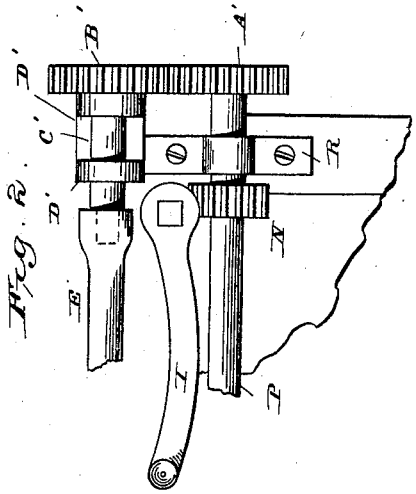

Fig. 1.

Witnesses.
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J. J. O'Cantley.

Inventor.
E. Wagoner.
By C. M. Alexander
Attorney.

(Model.) 2 Sheets—Sheet 2.

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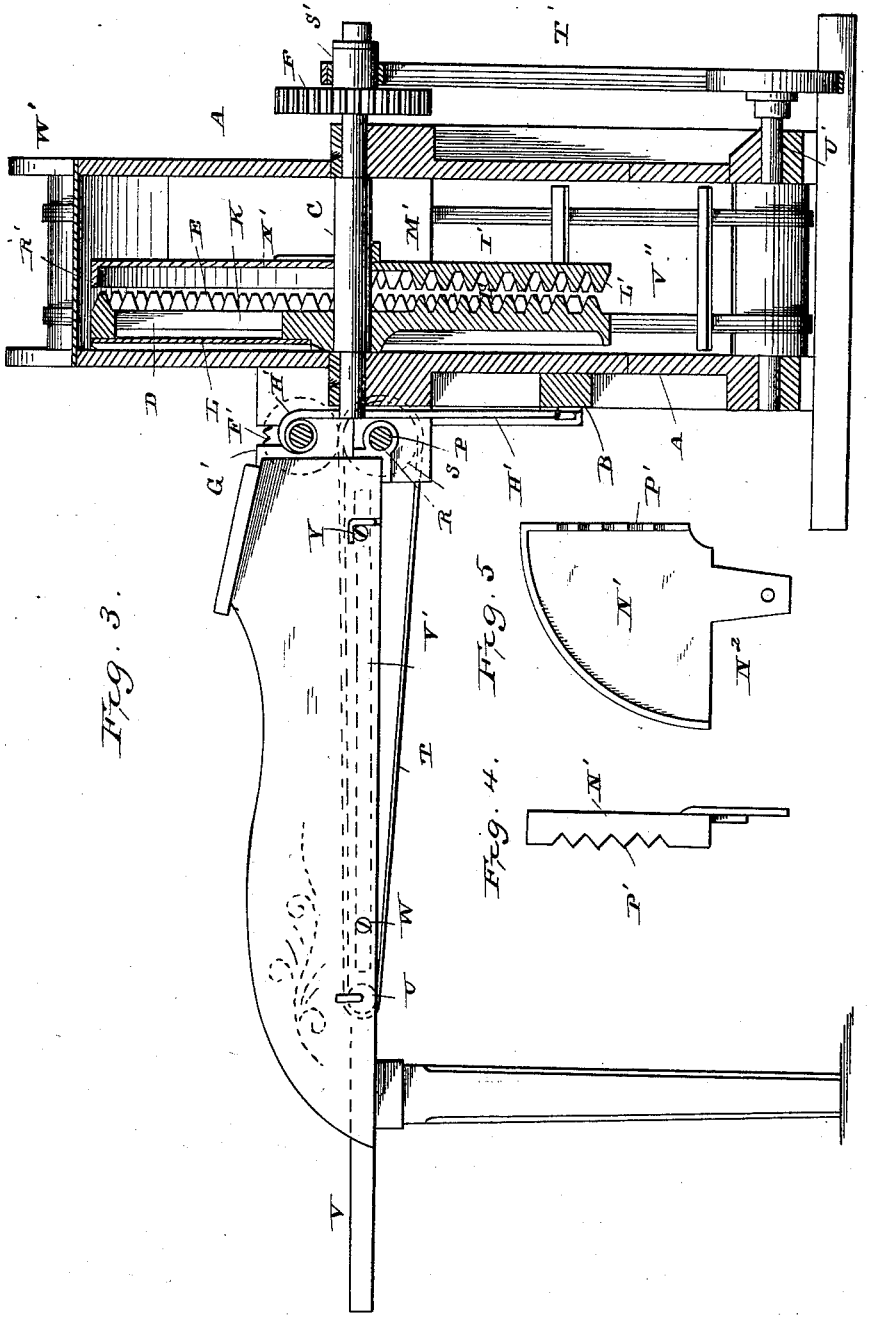

Fig. 3.

Fig. 5

Fig. 4.

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UNITED STATES PATENT OFFICE.

ELIJAH WAGONER, OF WESTMINSTER, MARYLAND.

FODDER-CUTTER.

SPECIFICATION forming part of Letters Patent No. 264,800, dated September 19, 1882.

Application filed May 31, 1882. (Model.)

To all whom it may concern:

Be it known that I, ELIJAH WAGONER, of Westminster, in the county of Carroll, and in the State of Maryland, have invented certain new and useful Improvements in Straw-Cutters and Corn-Fodder Masticators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in apparatus for cutting straw, hay, and other materials, or for cutting and masticating or disintegrating fodder—such as cornstalks with the ears intact—and other similar cereals, as more fully hereinafter specified. These objects I attain by the apparatus and mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a plan view of my improved machine with the top removed; Fig. 2, a detached view of the feed-gear; Fig. 3, a partial side elevation and vertical section of the machine with the top in place, and Fig. 4 a detached view of the removable sector forming part of the apparatus. Fig. 5 is a side view of the removable sector N′, having a lug, N², by which it is secured to the frame of the machine and held in a vertical position. This sector is provided with a row of saw-like teeth, P′, adapted to permit the teeth of the wheel D to pass in close proximity without touching, and to keep the straw, hay, or other material within the machine, and thus be subjected to the action of the teeth of the wheel D and semicircular plate I′.

The letter A indicates a box or casing mounted or supported in a suitable frame, B, the said box or casing being provided with a cap or cover adapted to inclose a portion of the upper parts of the working mechanism of the apparatus. The upper edges of the frame B or the upper edges of the box A are provided with boxes or bearings for the journals of a transverse shaft, C, upon which is mounted a disk or wheel, D, which is recessed on one face, and on the other is provided with a series of teeth or masticators, as indicated by the letter E. The said shaft C projects at one side of the casing, and has rigidly secured to it a pinion, F, which intergears with a cog-wheel, G, on the driving-shaft H of the machine, which is provided with driving-cranks I, by means of which power may be applied to the apparatus. The wheel D is slotted radially, as indicated by the letter K, and is provided with a radially-located cutter, L, as indicated. Although but one slot and cutter are represented, it is evident that more may be employed, as may be found convenient.

The letter M indicates a worm on the shaft H, which intergears with a pinion, N, on a shaft, P, extending longitudinally along the outer side of the box or casing and journaled in bearings R. The said shaft is provided with a drum or roller, S, over which passes a feed-belt, T, which also passes around a drum, U, journaled near the forward end of a feed-trough, V, which is detachably secured to the brackets in which the forward journals of the shaft P run. The said trough, between the return portions of the belt, is provided with a platform, V′, which is secured by means of the pins W and Y, the pins Y being hooked at their outer ends, so as to sit over projections on the trough and secure it to the machine.

The shaft P is provided at one end with a pinion, A′, which intergears with a pinion, B′, on a short shaft, C′, journaled in bearings D′, attached to the casing of the apparatus. The said shaft is provided with a squared end, which fits in a similarly-formed socket at the end of a rod, E′, which is formed with a similar socket at the other end, which oversits the squared end of the journal of a corrugated feed-roller, F′, which journal runs in vertically open or slotted bearings G′, as indicated, so as to permit the said roller to rise and fall or adjust itself automatically to the material to be manipulated. The journal of said feed-roller F′ is held normally on opposite sides by means of the springs H′, which cause the roller to bear upon the material passing under it with proper pressure.

The letter I′ indicates a semicircular plate, provided with teeth or masticators, and located opposite the toothed side of the rotating cutter-wheel, before mentioned, at the lower half thereof. The said plate is confined in place in any convenient manner, and divides the lower portion of the casing into longitudinal compartments L′ M′.

N′ indicates a detachable segment, which is

adapted to be secured above the edge of the semicircular plate, above mentioned, forward of the shaft on which the cutting-wheel is mounted, the said segment being provided with a series of serrations, P′, on its vertical edge, and with a rim, R′, on its curved edge, as indicated.

The shaft C is provided with a pulley, S′, which connects by a belt, T′, with a pulley on a shaft, U′, over which passes the bands of a traveling elevator, V″, running in an inclined trough, W′, by means of which the material operated upon may be carried off.

The operation of my invention will be readily understood in connection with the above description, and is as follows: When the apparatus is designed simply to cut straw, hay, or other material the segment above mentioned is removed, and as the material is cut it is thrown directly into the casing and falls upon the elevator, and is carried out by the same. When fodder is to be cut and masticated or disintegrated also the segment is inserted, which causes the material to pass between the toothed surfaces of the cutting-wheel and the semicircular disk, by which it is carried downward and subjected to the action of the teeth before being discharged.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a straw-cutting machine, the combination of the rotary cutting-wheel D and the semicircular masticator I′ with the removable sector N′, having lug N^2, rim R′, and vertical row of saw-shaped teeth P′, adapted to permit the teeth of the wheel D to pass in close proximity without touching, as shown and described, and for the purposes set forth.

In testimony whereof I affix my signature, in presence of two witnesses, this 26th day of May, 1882.

ELIJAH WAGONER.

Witnesses:
CHAS. D. DAVIS,
J. J. MCCARTHY.