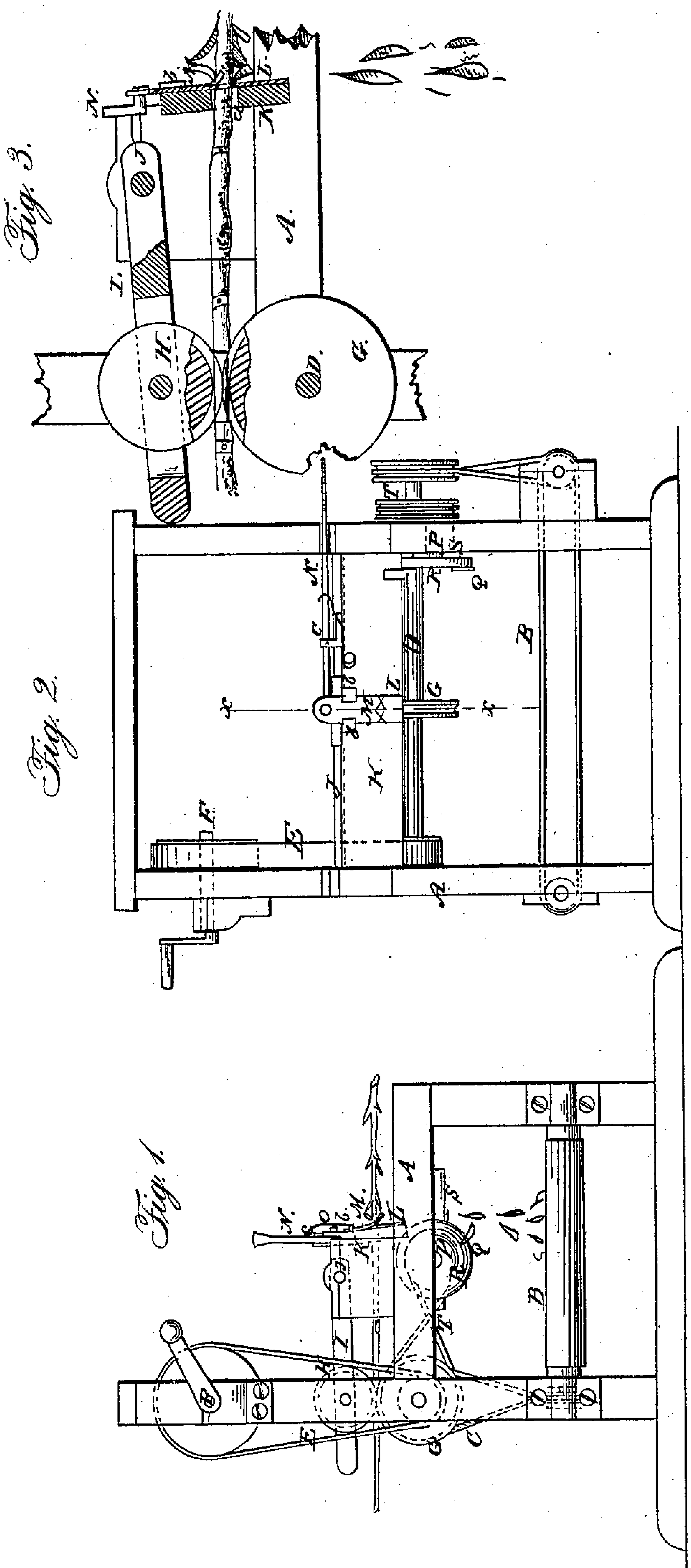
J. A. CAMPBELL.

Cane-Stripper.

No 64,836. Patented May 21, 1867.



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JAMES A. CAMPBELL, OF STOW, OHIO.

Letters Patent No. 64,836, *dated May* 21, 1867.

CANE AND SORGHUM-STRIPPER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES A. CAMPBELL, of Stow, in the county of Summit, and State of Ohio, have invented a new and improved Machine for Stripping the Leaves from Sorghum or Sugar Cane, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

This invention relates to a new and improved machine for stripping leaves from sorghum and other sugar cane, and also for depriving the stalks of their tops, so that the cane will be fully prepared for the rolling or crushing-mill.

The invention consists in a peculiar construction, arrangement, and application of parts, as hereinafter fully shown and described, whereby the desired work may be performed in a very expeditious and perfect manner. In the accompanying sheet of drawings—

Figure 1 is a side view of my invention.

Figure 2, a front view of the same; and

Figure 3, an enlarged vertical section of the principal working parts of the same, taken in the line *x x*, fig. 2.

Similar letters of reference indicate corresponding parts.

A represents the framing of the machine, constructed in any proper manner to support the working parts; and B represents a horizontal endless apron, placed in the lower part of the framing A, and operated by a belt, C, from a shaft, D, the latter being operated by a belt, E, from a driving-shaft, F, in the upper part of the framing, (see more particularly fig. 2.) On the shaft D there is keyed, or otherwise secured, a wheel, G, having a grooved periphery; and upon this wheel G a similar wheel, H, rests, which also has a grooved periphery, but is smaller in diameter than G. This wheel H is fitted in the rear part of a plate or bar, I, of wood or iron, the front part of said plate being fitted loosely on a fixed rod, J, in the framing A. The plate or bar I, whether of wood or metal, should be sufficiently heavy to bear upon the wheel G with a requisite degree of pressure. K is a board, secured transversely in the framing A, and having a hole, *a*, made in it. To the outer side of this board K there is permanently secured a cutter or stripper, L, the upper edge of which is of concave V-shape, as shown clearly in fig. 2; and above the cutter or stripper L there is placed another cutter or stripper, M, which is allowed to slide freely between guides *b b*. The lower edge of M is formed precisely like the upper edge of L, but it is curved or bent outward, as shown in fig. 1, the two V-shaped cutting edges forming a square opening of greater or less capacity, according as M is raised or lowered. The upper end of the cutter or stripper M is connected to a lever, N, which has its fulcrum *c* on the top of the board K, and a spring, O, bears against said lever, the spring having a tendency to press the cutter or stripper M downward. P is a shaft, placed in the framing A, and having a cutter, Q, attached to a wheel, R, on its inner end. This cutter is attached to the wheel R in an oblique position, so as to operate with a drawing or slanting cut, and it, as the wheel R rotates, works over the edge of a concave plate, S, shown in figs. 1 and 2. The shaft P is driven by a belt, T, from the shaft D.

The operation of the machine will be readily understood. The shaft F is driven by any convenient power, and the stalks have their tops taken off by the cutter Q, the tops falling upon the apron B, which discharges them at one end of the machine. The stalks are then drawn by the wheels G H between the cutters or strippers L M, which effectually strip the leaves from the stalks, the spring O being of sufficient strength to cause the upper stripper L to bear or press down on the stalk with such a degree of pressure as to insure the two strippers taking the leaves entirely off from the stalks. The leaves, as they are stripped from the stalks, drop upon the apron B, which discharges them at one side of the machine.

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

1. The rollers G H, arranged substantially as shown and described, in connection with the stationary cutter or stripper L, and the yielding or pressure cutter or stripper M, having the lever N and spring O applied to it, substantially as and for the purpose set forth.

2. The rotary topping-cutter Q, attached to wheel R, in connection with the concave plate S, all arranged to operate in connection with the stripping device, substantially as shown and described.

3. The combination of the endless leaf and top-discharging apron B with the leaf-stripping and stalk-topping mechanism, substantially as and for the purpose herein set forth.

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