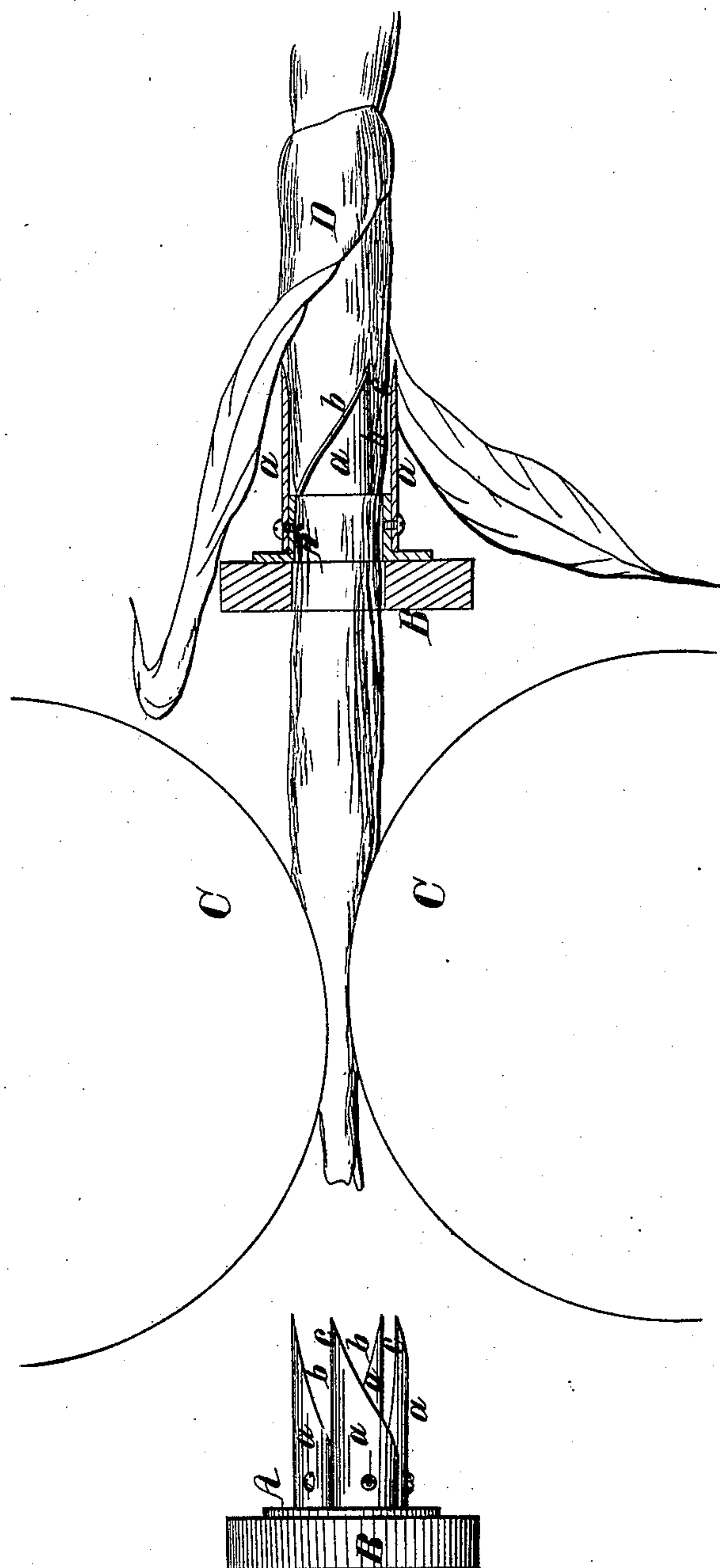


C DICKEY.
Cane-Stripper.

No. 19,688.

Patented Mar. 23, 1858.



UNITED STATES PATENT OFFICE.

C. DICKEY, OF MERCERSBURG, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR CUTTING THE LEAVES FROM THE SUGAR-CANE PREPARATORY TO GRINDING.

Specification forming part of Letters Patent No. **19,688**, dated March 23, 1858.

To all whom it may concern:

Be it known that I, CALVIN DICKEY, of Mercersburg, in the county of Franklin and State of Pennsylvania, have invented a new and useful device for cutting the leaves from sugar-cane preparatory to grinding or crushing the stalks for the purpose of expressing the juice therefrom; 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 side view of my improvement. Fig. 2 is a longitudinal section of same.

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

This invention consists in having a series of cutters attached to a tubular flange so as to form a hollow cutting-cylinder, said cutting device being connected with a grinding or crushing mill in such a way that the stalks of sugar-cane will be drawn through it by the rollers of the mill and the leaves cut from the stalk.

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

A represents a metal tubular flange, which is attached to a board or plate, B. This board or plate is connected with the framing of a grinding or crushing mill in such a way that the axis of the tubular flange will be at right angles to the axis of the rollers C of the mill and in the same plane as the space between the rollers or their point of contact when together. (See Fig. 2, in which the rollers are shown in red.) To the tubular flange A a series of cutters is attached. The cutters are each formed of a longitudinal section of a cylinder, and their outer parts are beveled or cut diagonally at one side, as shown at *b*, the opposite side being parallel with the axis of the flange, as shown at *c*. The inner parts of the cutters are secured to the tubular flange A by screws or rivets. The outer parts of the cutters, at both edges, are beveled or have a basil

at their inner sides to form cutting-edges. The inner parts of the cutters *a* extend entirely around the flange A, and the whole forming a cutting-cylinder, the inner diameter of which is of sufficient capacity to allow the cane-stalks to pass through.

The operation is as follows: The stalks (shown in red, and designated by D) are fed one at a time, top foremost, through the cutting-cylinder, the rollers C of the mill catching the stalks and drawing them through the cutting-cylinder. The cutters *a*, as the stalks are drawn through the cutting-cylinder, separate the leaves from the stalks near their junction with the latter, (see Fig. 2,) and owing to the obliquity of one side of the cutters a drawing or oblique cut relatively with the fibers of the leaves is obtained, thereby facilitating the cutting operation.

This simple device may be constructed and applied to the grinding or crushing mill at a trifling expense, and will effect a saving of labor and time. The cutting of the leaves from the stalks by hand is a tedious and disagreeable operation, the hands are frequently lacerated, and the time consumed in performing the work is almost equal to that expended in its cultivation.

I would remark that the cutting device will operate equally well whether placed vertically or horizontally, and that the device may be used for cutting the leaves from the ordinary sugar-cane as well as from the new variety termed the "Chinese sugar-cane."

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

The cutting device formed of the cutters *a*, attached to a tubular flange, A, the whole being constructed and arranged so as to operate substantially as and for the purpose set forth.

CALVIN DICKEY.

Witnesses:

P. A. RICE.

JNO. A. HYSSONG.