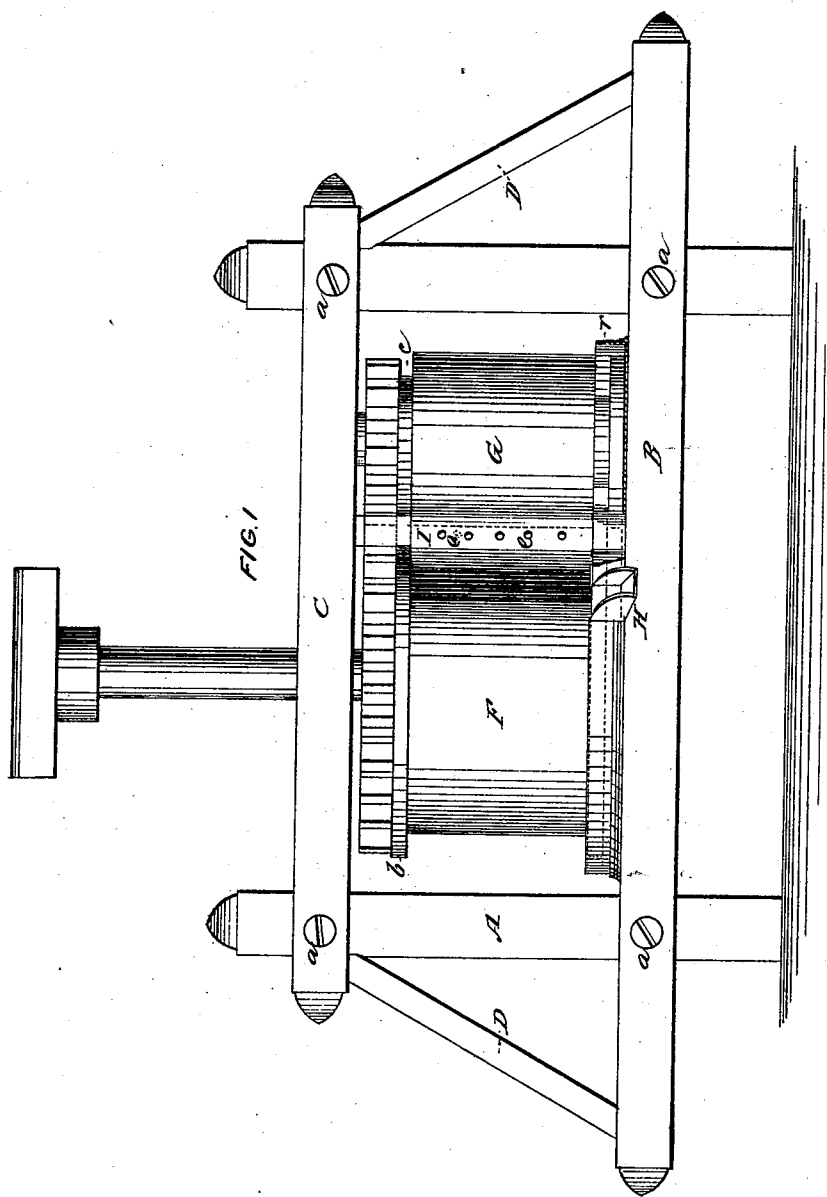


A. DEMARCE.

Sugar Mill.

No. 96,088.

Patented Oct. 26, 1869.



WITNESSES:

*Phil F. Dodge*  
*R. W. Lodge*

INVENTOR:

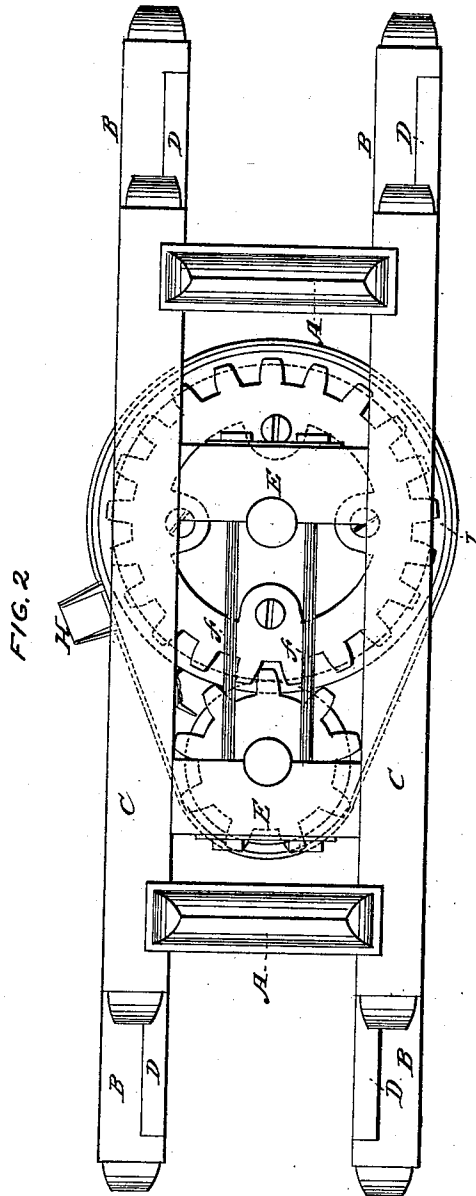
*Anthony Demarce*  
*by Dodge & Menner*  
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2 Sheets—Sheet 2.

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*Anthony Demarc*  
*by Dodge & Mason*  
*his attys*

# United States Patent Office.

ANTHONY DEMARCE, OF FAIRFIELD, IOWA.

Letters Patent No. 96,088, dated October 26, 1869.

## IMPROVEMENT IN SUGAR-CANE MILLS.

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, ANTHONY DEMARCE, of Fairfield, Jefferson county, Iowa, have invented certain new and useful Improvements in Cane-Mills; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to mills for crushing cane for the manufacture of sirup and sugar; and

The invention consists in a novel construction of the mill, as hereinafter more fully explained.

Figure 1 is a side elevation of my improved machine, set up, ready for use; and

Figure 2 is a top plan view of the same.

It is very desirable, in certain portions of the country, to have mills for crushing sorghum cane, that can be easily and readily set up or taken down, and transported from one locality to another, so as to be used on farms where the cane is grown.

To accomplish these objects, and at the same time to produce a mill that will work efficiently, is the purpose of my invention; and to produce such a mill, I first make a frame, consisting of two strong uprights, A, of proper size, connected at top by a longitudinal bar or piece of timber, C, on each side, and by similar but longer pieces, B, at the bottom, as shown in figs. 1 and 2.

These timbers are notched together, and firmly secured by bolts, a, which pass through from side to side, thus firmly fastening all together.

To render it more firm and rigid, a brace, D, is located at each corner, as represented in fig. 1, which shows one side only, the braces on the opposite side being the same, as represented in fig. 2.

Upon the lower bars B, of the frame, I bolt a bed-plate, J, made of cast-iron, with a raised flange or rim, r, around its outer edge, and also around the journals of the rollers, to prevent the juice from escaping, and with a spout, H, at one side, to conduct the juice into a suitable receptacle.

I then mount upon this bed-plate two vertical rollers, F and G, the former being the larger, and having its shaft extending above the frame, and provided with a suitable plate for securing the sweep, by which they are turned, as is usual in this style of mills.

Both rollers are provided with cogs around their upper end, so arranged as to gear together, and thus insure the turning of the smaller one, by the movements of the larger. And near the top, the larger roll F is provided with a projecting flange, b, which fits into a corresponding groove, c, in the roll G, as represented in fig. 1, this flange and groove thus serving to keep the two rollers even, and prevent either from moving endwise away from the other.

The journals of these rollers, at the top and bottom, have their bearings in cross-beams E, as shown in fig. 2, and these are held together by strong iron bolts, f, which are provided with nuts, for tightening up the cross-bars, and thus compensating for wearing, and also to adjust the rollers, as may be desired, the bars E, of course, being left free to move slightly toward each other.

To feed the cane to the rollers evenly, I place a vertical guide, I, just in front of the point where the rollers meet, and make in it a series of holes, e, as shown in fig. 1, of proper size to feed single canes through. The ends of the canes, being inserted so as to be caught between the rollers, are drawn in by the action of the rollers, so that it is only necessary for the attendant to insert their ends in the holes.

By this method of constructing and arranging the various parts, I am enabled to produce a very simple and efficient cane-mill, one that can be quickly and easily taken down, removed, and set up again, it being thereby specially adapted to the wants of farmers, and those raising but small quantities of sorghum.

Having thus described my invention,

What I claim, is—

A cane-mill, consisting of the frame, constructed substantially as described, with the adjustable cross-bars E, and rods f, and having the rollers F and G, and bed-plate J, all constructed and arranged substantially as set forth.

In testimony of which invention, I hereunto set my hand.

ANTHONY DEMARCE.

Witnesses:

J. M. SHAFFER,  
JAMES ECKERT.