W. Bull.

Sugar Cane Press.

No. 24,789. Patented Jul. 19, 1859.

Fig. 1.

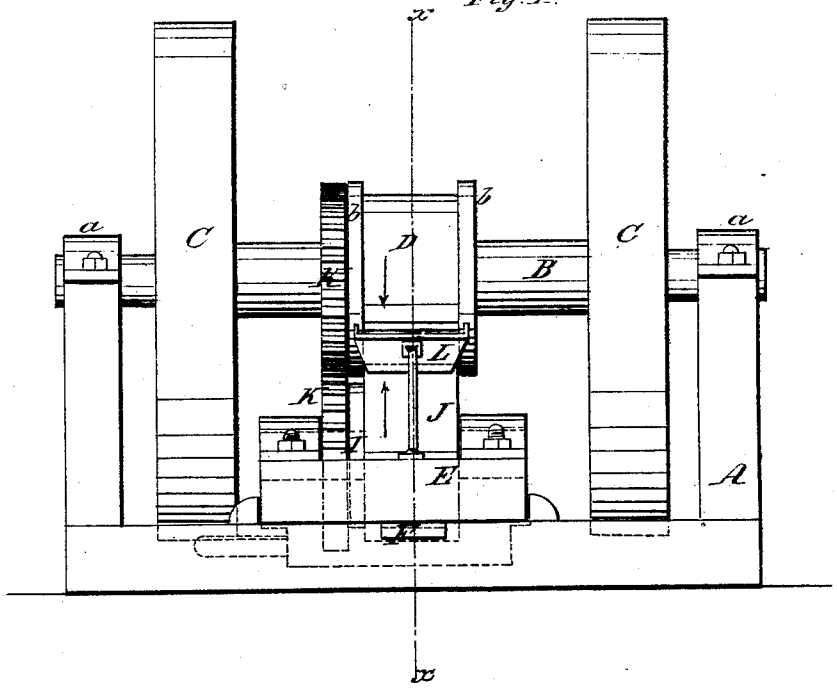
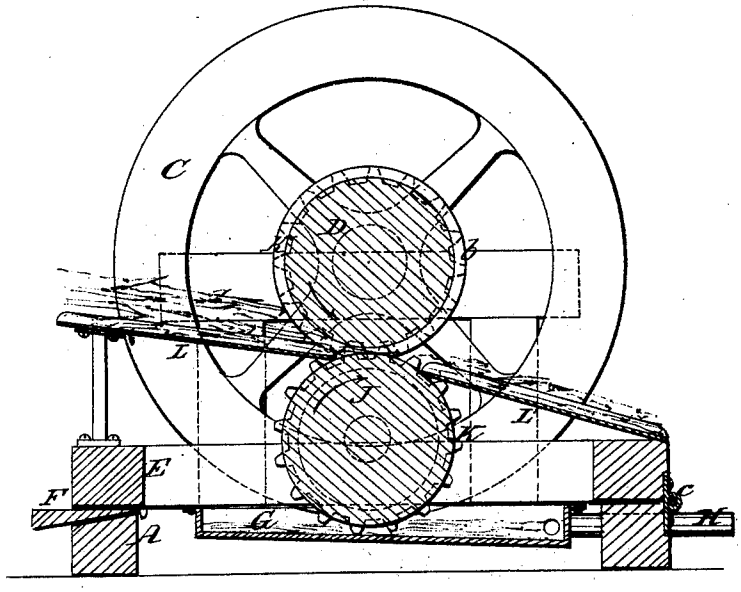


Fig. 2.



Witnesses.
Geo. Baxter,
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UNITED STATES PATENT OFFICE.

WILLIAM BULL, OF NEW CALIFORNIA, WISCONSIN.

IMPROVEMENT IN SUGAR-CANE PRESSES.

Specification forming part of Letters Patent No. **24,789**, dated July 19, 1859.

To all whom it may concern:

Be it known that I, WILLIAM BULL, of New California, in the county of Grant and State of Wisconsin, have invented a new and Improved Press for Expressing the Juice from Sugar-Cane; 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 an end view of my invention in elevation; Fig. 2, a vertical section of the same, taken in the line *x x*, Fig. 1.

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

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

A represents a suitable framing, in the upper part of which a shaft, B, is placed in stationary bearings *a*. On the shaft B two fly-wheels, C C, are placed, and also a roller, D, the latter being of metal or wood, cast metal being preferable, and having a flange, *b*, at each side of it, as shown clearly in Fig. 1. On the lower part of the framing A, and between the two fly-wheels C C, a frame, E, is placed and secured at its front end by hinges *c*. On the back part of the framing A, and below the frame E, a wedge, F, is placed, by adjusting which the back part of the frame E may be elevated or depressed at pleasure. To the under side of the frame E a pan or reservoir, G, is secured, having a discharge-spout, H, attached. On the frame E a shaft, I, is placed, said shaft having a roller, J, placed on it, which fits between the flanges *b b* of the roller D, as shown clearly in Fig. 1. The two shafts are connected by toothed wheels K K. To the frame E two inclined troughs or spouts, L L′, are attached, said troughs or spouts being in the same inclined plane and placed at opposite sides of the rollers, and in line with their "bite." (See Fig. 2.)

The operation is as follows: Motion is given the shaft B in any proper way, either by hand or other power, and the cane is placed on the more elevated trough or spout L, and passes between the rollers D J, which rotate in the direction indicated by the arrows. The juice is expressed from the cane by the pressure of the rollers D J, the crushed cane passing down the spout L′ and the juice falling into the reservoir G, from which it is discharged through the spout H. The pressure of the rollers on the cane is graduated by adjusting the wedge F.

This machine may be constructed at a very small cost. It has been practically tested and operates very successfully, and is well adapted for expressing the juice from the "Chinese cane," (*Sorghum saccharatum.*)

I do not claim, broadly, the employment or use of pressure-rollers, for they have been long used for similar or analogous purposes; but,

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

The arrangement and combination of the hinged adjustable frame E, roller J, frame A, wedge F, inclined spouts L L′, and roller D, as and for the purpose herein shown and described.

WILLIAM BULL.

Witnesses:
GEO. B. CARTER,
A. R. BUSHNELL.