(No Model.)

W. A. ROBERTS.

CANE MILL.

No. 263,811. Patented Sept. 5, 1882.

Fig. 1.

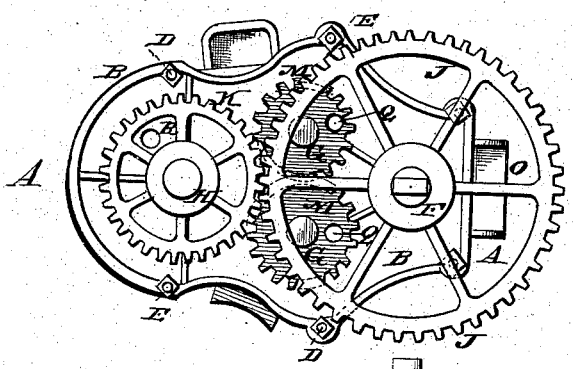


Fig. 2.

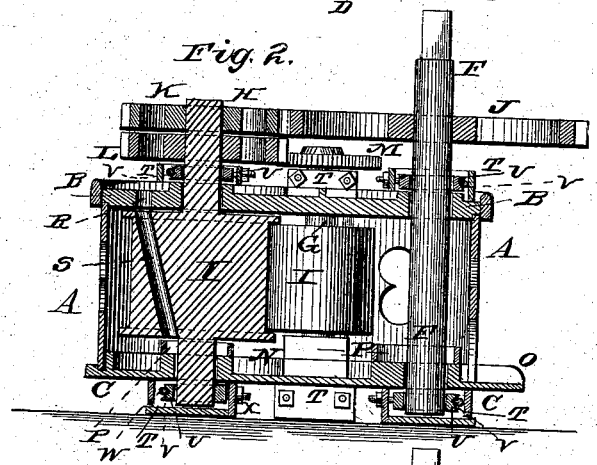


Fig. 3.

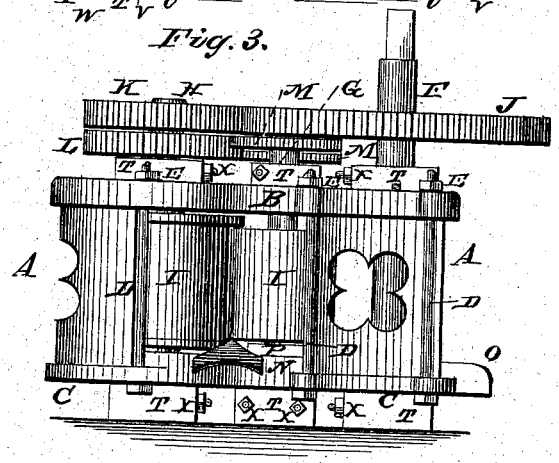
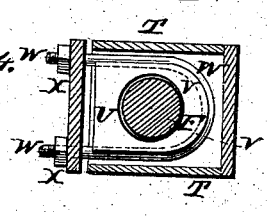


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM A. ROBERTS, OF MILLEDGEVILLE, KENTUCKY.

CANE-MILL.

SPECIFICATION forming part of Letters Patent No. 263,811, dated September 5, 1882.

Application filed July 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. ROBERTS, of Milledgeville, in the county of Lincoln and State of Kentucky, have invented certain new and useful Improvements in Cane-Mills; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a top view. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is a side view, and Fig. 4 is a horizontal sectional detail view.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to cane-mills; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the frame of the machine, which consists of a top plate or cap, B, and bottom plate, C, connected by bolts and nuts D E. The plates B C have bearings for the vertical main shaft F, and shafts G G H, carrying the crushing-rollers I, which may be of any suitable construction. The main shaft F, to which a sweep is to be attached for the application of power, carries the master-wheel J, meshing with a gear-wheel, K, upon shaft H, which latter carries an additional gear-wheel, L, meshing with wheels or pinions M upon the shafts G G, which are thus operated. The bottom plate, C, of the frame is surrounded by a flange, N, which confines the juice expressed by the rollers and guides it to the spout O. The bearings of the several shafts are surrounded by flanges P, which are made higher than the outer flange, N, in order to prevent the oil or lubricating material from escaping into the juice. The several gear-wheels of the shafts G G H have perforations Q, which may be made to register with perforations R in the cap-plate B. The crushing-rollers I have perforations or channels S, the upper ends of which may likewise be made to register with the openings R Q, and which extend diagonally through the said rollers to the bearings at the lower ends of their respective shafts. By causing the said openings to register lubricating material may be readily poured through into the said lower boxes or bearings. The boxes or bearings of the several shafts are surrounded by flanges T, which confine blocks U, having openings in which said shafts are journaled. The blocks U have grooves V, in which bails W are fitted, the ends of which project through the flanges and are provided with nuts X. By tightening the latter the shafts may be tightened in their bearings, so as to compensate for wear.

I claim and desire to secure by Letters Patent of the United States—

1. The combination of the top plate, B, having openings R, the bottom plate, C, having flanges P, the shafts G G H, having rollers I, provided with perforations or channels S, and gear-wheels provided with openings Q, as and for the purpose set forth.

2. The combination of the frame A, the vertical shafts, the flanges T, the bearing-blocks U, having grooves V, the bails W, and the tightening-nuts X, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM ALEN ROBERTS.

Witnesses:
EDWARD PENDLETON,
DAVID W. VANDAVER.