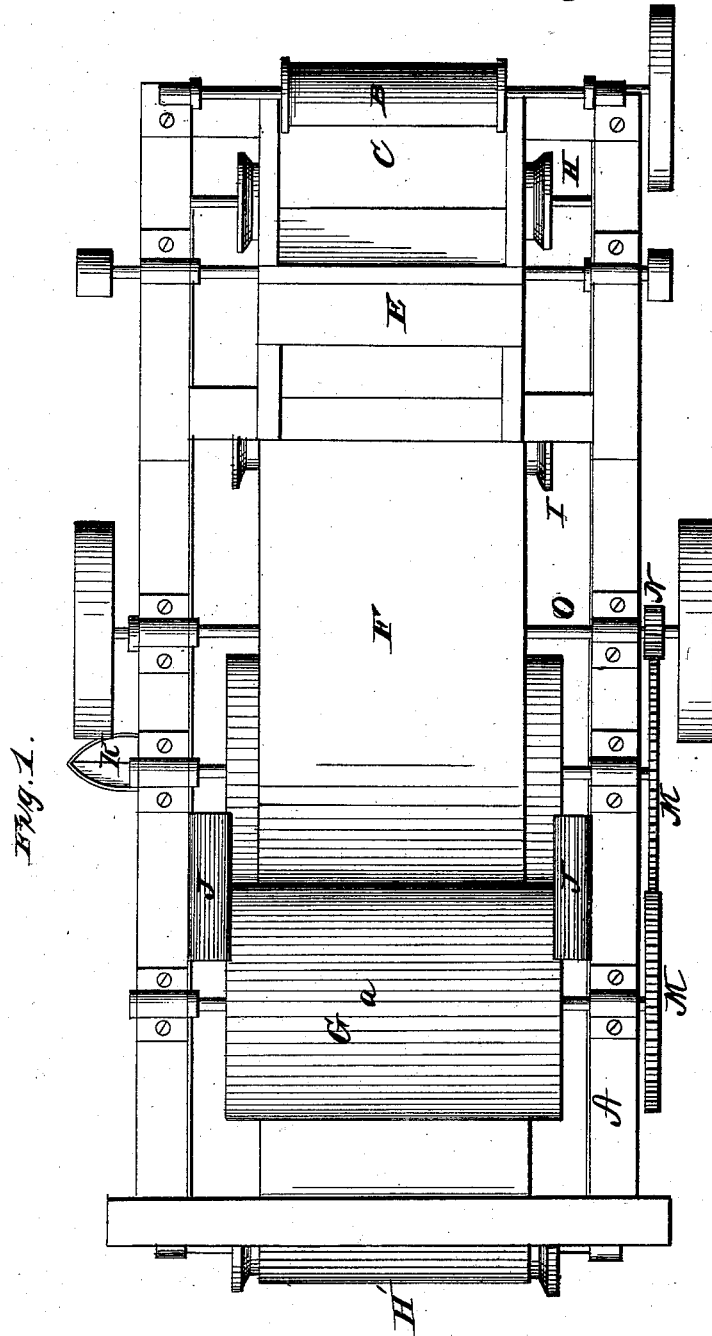


J. L. BARNES.
Cider-Mill.

No. 207,001.

Patented Aug. 13, 1878.



WITNESSES:
Frank L. Curand
Frank Galt

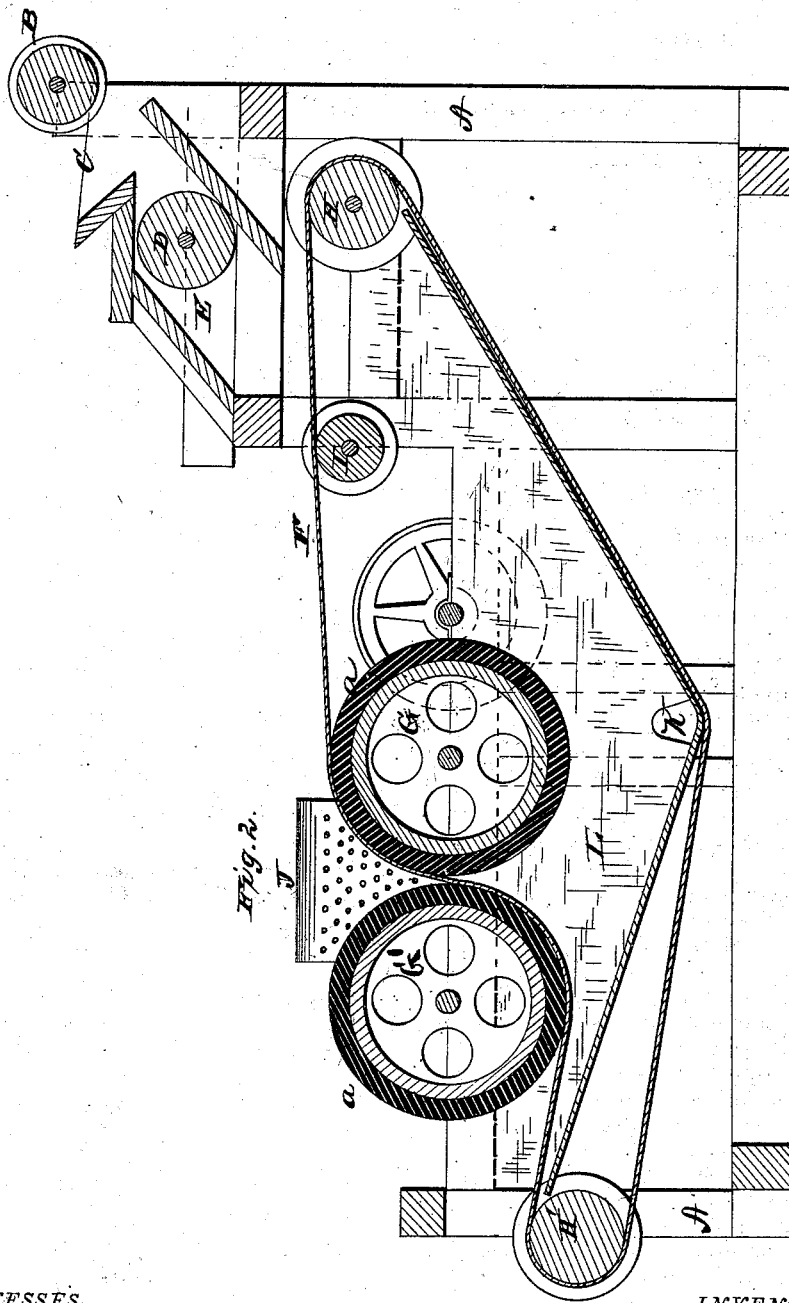
By

INVENTOR
Jos L. Barnes
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 Attorneys

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WITNESSES
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UNITED STATES PATENT OFFICE.

JOHN L. BARNES, OF WARSAW, INDIANA.

IMPROVEMENT IN CIDER-MILLS.

Specification forming part of Letters Patent No. **207,001**, dated August 13, 1878; application filed May 29, 1878.

To all whom it may concern:

Be it known that I, JOHN L. BARNES, of Warsaw, in the county of Kosciusko, and in the State of Indiana, have invented certain new and useful Improvements in Cider-Mills; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a cider-mill, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of my improved cider-mill. Fig. 2 is a longitudinal vertical section of the same.

A represents the frame of my cider-mill, at one end of which is an elevated roller, B, across the machine.

In a full-sized machine an elevator is to be carried over the roller B, such elevator consisting of an endless apron, or two or more endless belts, to which are attached suitable buckets for carrying up the apples and depositing them in a hopper, C, immediately in front of and below the roller B.

From the hopper C the apples pass into a box, E, where they are crushed and ground by a grinding-roller, D, operating against the inclined bottom of the box E. The pomace falls upon an endless apron, F, and is by it carried to the pressure-rollers G G'.

The endless apron passes around a roller, H, below and in rear of the box E, then forward over a guide or supporting roller, I, then over the pressure-roller G, between the two rollers G G', and underneath the latter roller, G'. From under the latter roller the apron F passes around a roller, H', at the front end of the machine, and thence back to the rear roller, H.

The two pressure-rollers G G' are provided with rubber coverings *a a*, and they run close

together, so as to press all the cider out of the pomace as it is carried between them by the endless apron F.

Between the rollers G G', at each end, is a screen, J, to prevent the pomace from passing over the ends of the rollers, while it permits the cider to pass through.

All the cider is collected by a stationary apron, L, arranged between the upper and lower parts of the endless rotating apron F, and extending the entire length of the machine, as shown.

The bottom of the stationary apron is inclined from both ends toward the center, and has a spout, K, at one side, through which the cider passes out into a vessel placed for its reception.

The pomace from which the cider has been pressed out is discharged by the apron F at the end of the machine.

The two pressure-rollers are geared together by cog-wheels M M, and receive their motion from a pinion, N, on the main shaft O, and from this shaft motion is communicated by suitable pulleys and belts to the other moving parts of the machine.

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

1. The combination of the endless apron F, passing around suitable rollers, the rubber-covered pressure-rollers G G', screens J J, and stationary gathering-apron L, substantially as and for the purposes herein set forth.

2. The within-described cider-mill, consisting essentially of a grinding device, an endless carrying-apron, two geared rubber-covered pressure-rollers with screens between their ends, and a stationary gathering-apron, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 15th day of April, 1878.

JOHN L. BARNES.

Witnesses:

JAMES H. CARPENTER,
SAMUEL R. COONS.