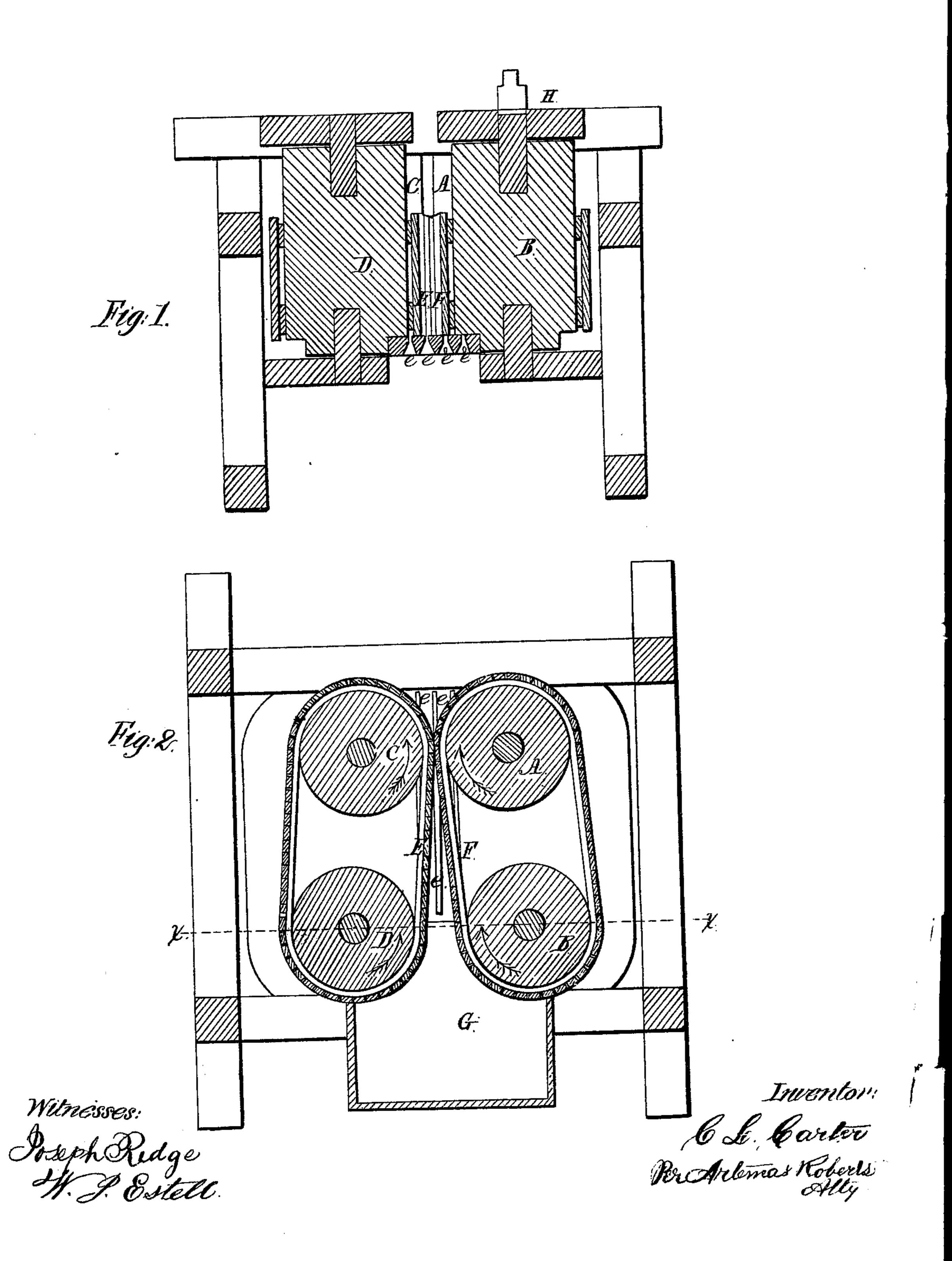
## C. J. Collies

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Faterited Since 15.1809.



## Anited States Patent Office.

## C. L. CARTER, OF UNION CITY, INDIANA.

Letters Patent No. 91,210, dated June 15, 1869.

## IMPROVED CIDER-MILL.

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, C. L. Carter, of Union City, in the county of Randolph, and State of Indiana, have invented a new and useful Improvement in Cider-Mills; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

The nature of my invention consists in arranging in a strong frame two tiers of rollers, of two or more in each tier. These are surrounded by slatted belts, between the outer surfaces of which the apples are to be pressed. The rollers are adjustable by means of keys, and are so arranged that the slatted belts approximate, thus presenting a converging channel for the passage of the apples. The expressed juice passes through triangular, or V-shaped slots in the floor of the mill, the lower end of the V being downward, thus obviating the danger of their becoming clogged with pomace.

Having thus briefly set forth the nature of my invention, I will proceed to describe the same with reference to the drawings, in which—

Figure 1 is a vertical section, made in the direction of the line x x, and

of the line x x, and

Figure 2 is a horizontal section through the rollers. Similar letters in the different figures refer to like parts of the machine.

The rollers are represented at A, B, C, and D, each roller being provided with journals that turn in suitable boxes attached in the frame.

Keys, or wedges, are provided in the frame, by means of which the journal-boxes may be moved to set the rollers in the required positions. By this means, the rollers C D may be adjusted with reference to the rollers A B; also, when necessary to tighten the belts,

the rollers B D may be forced away from the rollers A C.

At E and F are represented two slatted belts, or endless platforms, consisting of flexible belts, or chains, to which are attached narrow strips of wood, as represented in the drawings.

Apples, placed upon the apron G, are taken up and crushed between the surfaces of the revolving belts, being pressed more and more closely in passing each successive pair of rollers, the last pair being wedged sufficiently close to obviate the necessity of using a separate press.

The floor of the mill is provided with slots, e e, through which the expressed juice is allowed to pass into a receptacle below. These slots are triangular in section, the opening at the top of the floor being very narrow, while on the lower side it is much wider. By this arrangement, the pomace is prevented from entering the slots and remaining to clog them, as it would were they of equal width through the floor.

The journal of the roller A, represented at H, extends through the frame, and is provided with a pulley, or lever, by means of which power is communicated to the mill.

Having thus fully described my said invention, What I claim, and desire to secure by Letters Patent, is—

The combination of two tiers of vertical rollers, as described, with the belts E F and triangular slots e e, the whole being constructed to operate substantially in the manner set forth.

C. L. CARTER.

Witnesses:

L. D. LAMBERT, CHARLES T. PICKETT.