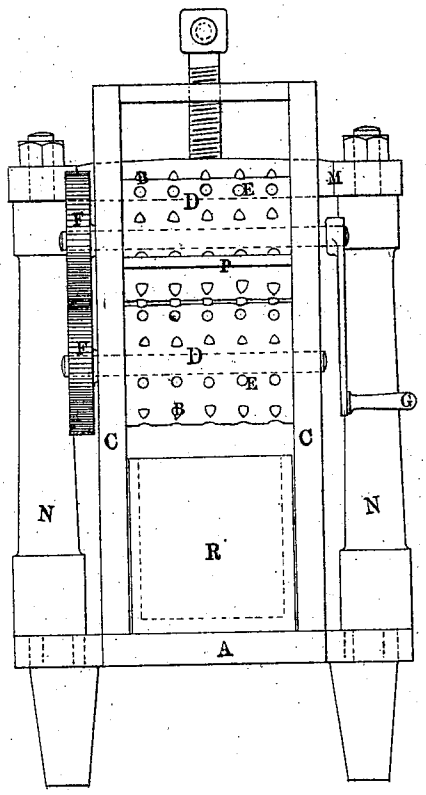
2 Sheets--Sheet 1.

H. & H. S. PAUL.

Cider-Mills and Presses.

No. 133,476. Patented Nov. 26, 1872.

Fig. 1.



William Gibson
Franklin Hennewell

Howard Paul
Henry S Paul

Scale 1½ in to the foot

2 Sheets--Sheet 2.

H. & H. S. PAUL.

Cider-Mills and Presses.

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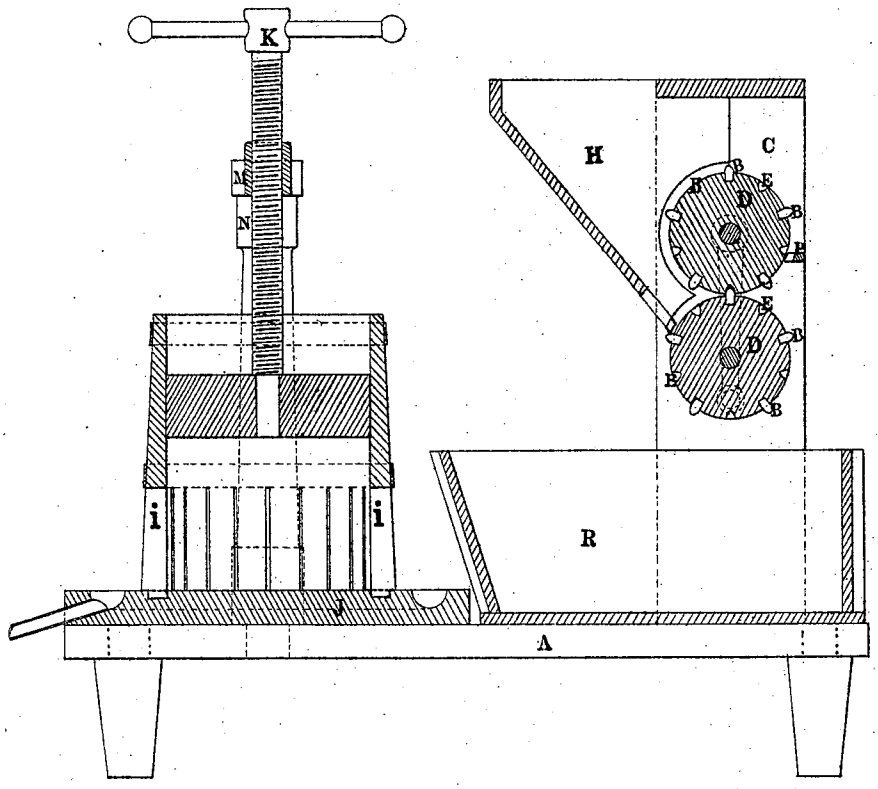
Fig. 2.



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Scale 1½ in to the foot

UNITED STATES PATENT OFFICE.

HOWARD PAUL, OF KITTERY, MAINE, AND HENRY S. PAUL, OF CAMBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN CIDER MILLS AND PRESSES.

Specification forming part of Letters Patent No. 133,476, dated November 26, 1872.

To all whom it may concern:

Be it known that we, HOWARD PAUL, of Kittery, in the county of York and State of Maine, and HENRY S. PAUL, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Cider Mill and Press, of which the following is a specification:

The first part of our invention relates to the mill-rolls, the surface of which has a number of rows of teeth, and between the teeth is a cavity to admit the teeth of the opposite roll. The object of the teeth is to force the apples between the rolls.

Figure 1 is an end elevation of the machine, showing the rolls. Fig. 2 is a sectional view, showing the ends of the rolls; also the teeth, and the cavity, and the press.

A is the bench of the machine, which is made of hard wood and supported by four legs. C is the upright pieces that support the rolls, which pieces are bolted to the bench *a*. *d d* are the mill-rolls, which are made of hard wood, placed one above the other, leaving one-eighth of an inch between them. B B B are the teeth, which are made of wood, and driven into the surface of the rolls, the projections of which are pointed. E E E, &c., are the cavities between the teeth. F F are the cog-wheels on the end of the shaft that passes through the rolls. G is the crank by which rotary motion is given to the rolls. H is the hopper that leads the apples to the rolls. P is the cleanser of the upper roll. The cleanser of the lower roll is the bottom edge of the hopper. R is the trough to catch the apples after they pass between the rolls. I is the press-tub, which is made of hard wood, and is round, and parallel inside and tapering outside, for the purpose of hooping securely, and slots cut through the lower edge to allow the cider to escape. J is the bed or bottom of tub, the top side of which has a groove to set the tub in, and also a gutter outside of the groove to conduct the cider round to the outlet. K is the press-screw, and attached to the lower end is the plunger, of wood, made to fit the tub. M is the cross-bar that the press-screw passes through, and secured to the top of stanchion *n n* by a bolt that passes through the stanchion, and screwed to the under side of the bench A by a nut.

We make no claim to the mode in which rotary motion is given to the rolls, nor the screw of the press, for we are aware that these are not new; but

We claim as our invention—

The mill-rolls *d d*, substantially as and for the purpose hereinbefore set forth.

HOWARD PAUL.
HENRY S. PAUL.

Witnesses:

WILLIAM GIBSON,
FRANKLIN HUNNEWELL.