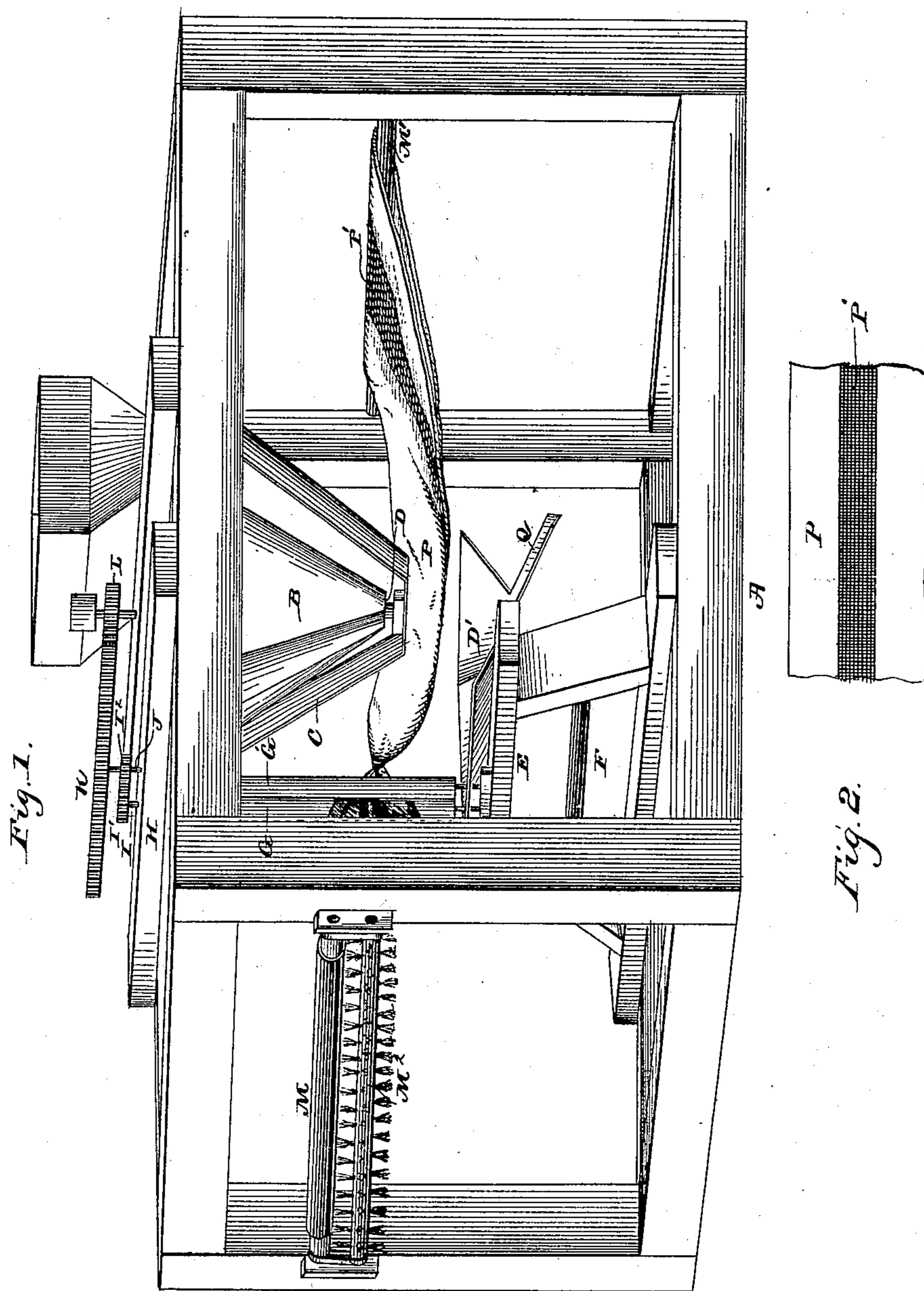


(No Model.)

M. B. KAYLOR.
CIDER MILL.

No. 323,041.

Patented July 28, 1885.



WITNESSES

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MARK B. KAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

CIDER-MILL.

SPECIFICATION forming part of Letters Patent No. 323,041, dated July 28, 1885.

Application filed December 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, MARK B. KAYLOR, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Cider-Mills, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to cider-mills; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

Figure 1 of the drawings is a view in perspective of a cider-mill embodying my improvements. Fig. 2 represents the endless apron.

Referring by letter to the accompanying drawings, A designates the frame of the machine, and B is the grinding-cylinder, which is in the form of the inverted frustum of a cone, and is incased in a shell, C, which is tapered from above downward, and has a discharge-opening, D, in its lower end. Below the shell C, I provide a trough or receptacle, D', which is secured to a bench, E, which is provided with a roll, F, journaled in the legs of the bench below the table of the same. Near the shell C, I provide two presser-rolls, G G', which are arranged vertically, having their lower bearings in boxes on the bench E and their upper bearings in a cross-piece, H, of the frame. The shaft I of the roll G is provided at its upper end with a pinion, I', which engages a pinion, I'', on the shaft J of the roll G'. The shaft J is longer than the shaft I, and is provided at its upper end with a gear-wheel, K, which engages a pinion, L, on the shaft of the grinding-cylinder B. The mill may be driven by horse, steam, hand or water power, either by attachment to the grinding-cylinder or to the press-rolls. At opposite ends of the frame A, I provide two rolls, M M'. Over these rolls M M' and the roll F, and between the vertical rolls G G', passes an endless apron, P, about one yard wide, with a netting, P', two inches wide in the middle, extending lengthwise of the apron. The pomace falls upon this apron as it leaves the shell C, and is carried by the apron P between the press-rolls G G', which operate as wring-

ing-rolls, and twist the apron and express the cider from the pomace. The cider falls into the receptacle D, and is delivered to a vessel placed to receive it by a spout, Q. After being pressed the pomace is discharged at the end of the mill, and may be removed in any convenient manner. The advantages of this construction are that the operation is made continuous, thus saving one-third in time, and it is more effective, the amount of pressure that may be placed on the pomace being practically unlimited.

In connection with the roll M, I provide a clearing-brush, M'', which clears the expressed pomace from the apron P.

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

1. The combination, with the conical grinding-cylinder and the vertical press-rolls, of the carrying-rolls, and the endless apron provided with the netting P', substantially as specified.

2. The combination, with the vertical conical grinding-cylinder and the vertical press-rolls, and mechanism, substantially as described, for operating said cylinder and rolls, of the carrying-rolls, the endless apron provided with the netting, and the receptacle with the spout, substantially as specified.

3. In a cider-mill, an endless apron provided with a longitudinal central strip of netting, substantially as specified.

4. The combination, with the frame provided with two carrying-rolls, and the bench having one carrying-roll and the receptacle with spout, of the grinding-cylinder, the vertical press-rolls, the endless apron with netting-strip, and mechanism, substantially as described, for operating the cylinder and press-rolls, as set forth.

5. The combination, with the carrying-rolls and the endless apron, of the clearing-brush, as set forth.

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

MARK B. KAYLOR.

Witnesses:

JOSHUA R. MORGAN,
ARTHUR C. SNYDER.