

E. HOWLAND.
Wine-Presses.

No. 144,456.

Patented Nov. 11, 1873.

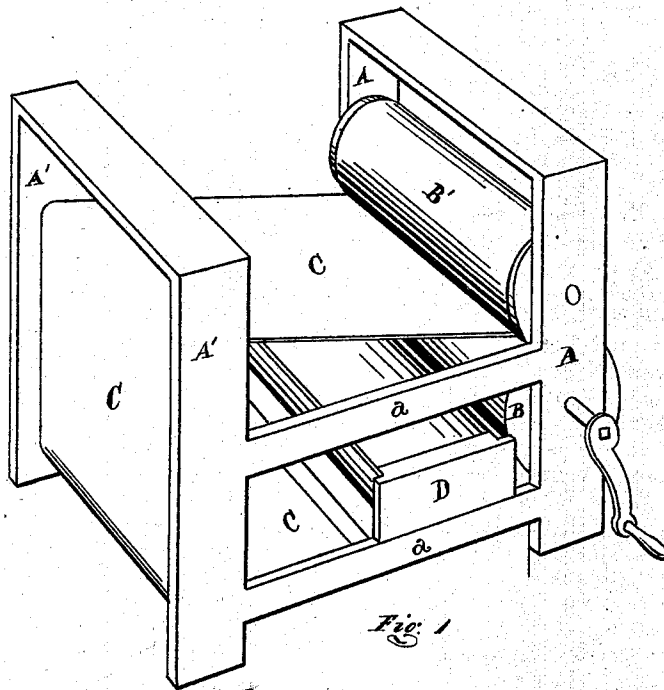


Fig. 1

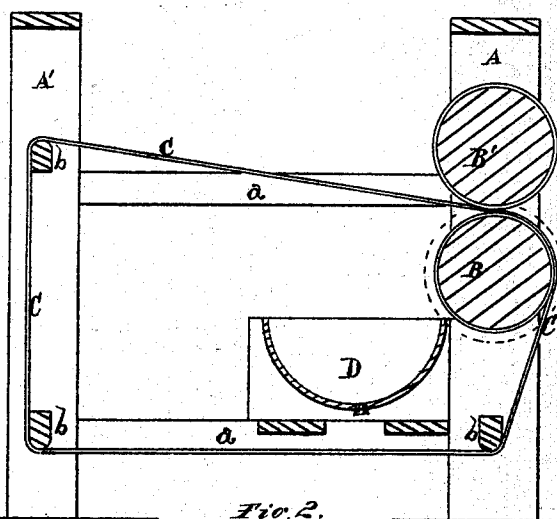


Fig. 2.

ATTEST:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

EDWARD HOWLAND, OF HAMMONTON, NEW JERSEY.

IMPROVEMENT IN WINE-PRESSES.

Specification forming part of Letters Patent No. **144,456**, dated November 11, 1873; application filed June 3, 1873.

To all whom it may concern:

Be it known that I, EDWARD HOWLAND, of Hammonton, in the county of Atlantic and State of New Jersey, have invented a new and useful Improvement in a Fruit-Press; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view. Fig. 2 is a cross-section of the press-rolls, the juice-tub, and a portion of the frame.

Like letters refer to like parts in both figures. The nature of this invention relates to an improved form of press for crushing grapes and various kinds of fruit, for expressing the wine or juice, by means of a pair of rolls covered with elastic blankets, so as not to crush the seeds, with an endless belt of some textile fabric passing between the rolls for delivering the fruit thereto, while it also serves to strain the juice; and it consists in the peculiar construction and arrangement, as more fully hereinafter set forth.

In the drawing, A A' represent two pairs of standards, each pair forming one end of a frame by being connected by longitudinal girts *a a* at the sides, and by cross-braces *b b*, the lower pairs of which may be rollers, if so preferred. B is a wooden roller journaled in the standards A, and may be rotated by a crank, as shown, or by a belt from any convenient source of power. B' is a similar roll journaled in said standards above the roll B, its boxes or bearings having free play vertically in the recesses formed in said standards to receive them, the said roll B' pressing, or resting with a pressure due to its weight, upon the roll B. In certain cases, where greater pressure is required, it may be obtained by springs acting upon the cap-bearings of the journals of the said roll B', or in any other convenient man-

ner. Each roll is covered with a blanket composed of several thicknesses of some textile fabric, or, if preferred, with one of elastic gutta-percha. C is an endless belt, of some suitable textile fabric, passing between the rolls down around the lower cross-brace of the standards A, around those at the other end of the frame, and across to the starting-point. D is a trough or tub to receive the expressed juice, and rests upon a pair of transverse supports reaching across the lower girts *a* of the frame, the tub being placed with one edge in close proximity to the periphery of the lower roll. It may also be provided with a cock or siphon to draw off the expressed juice.

The fruit to be crushed is placed upon the upper surface of the belt, which carries it to and between the rolls, which crush it and express the juice before passing it out from between them, the juice falling back down the face of the lower roll into the tub, first passing through the belt, which strains it from impurities, which are discharged, with the pulp, at the end of the machine.

Aside from the cheapness of its construction, this press, by reason of the continuity of its operation, has great capacity, requires but little power to operate it, and strains the juice in the process of expressing. While extracting all, or nearly all, the juice, the seeds are not crushed, by reason of the elastic blankets with which the rolls are clothed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The construction and arrangement within the frame of the press-rolls B B', covered with the yielding blankets, and the textile endless belt C, substantially as and for the purpose set forth.

EDWARD HOWLAND.

Witnesses:

G. F. SAXTER,
A. J. KING.