G. J. Wells,

Fruit Press.

No. 112,304. Patented Feb. 28. 1871.

Fig 1.

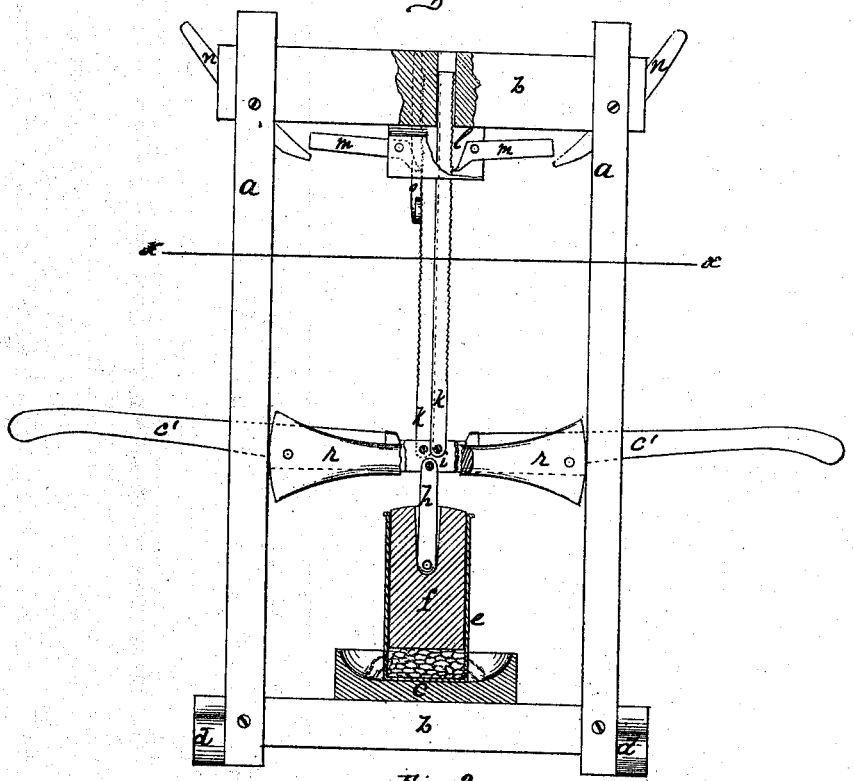
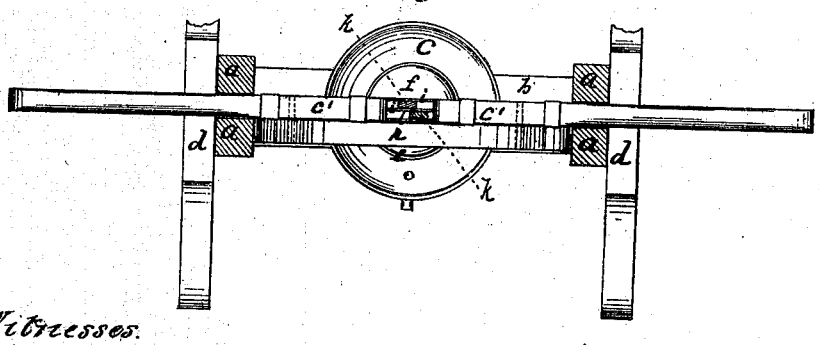


Fig. 2.



Witnesses.

H. J. Abbott

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GABRIEL J. WELLS, OF SOUTH VINELAND, NEW JERSEY, ASSIGNOR TO JOHN W. SNYDER.

Letters Patent No. 112,304, dated February 28, 1871.

IMPROVEMENT IN FRUIT-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

I, GABRIEL J. WELLS, of South Vineland, Cumberland county, New Jersey, have invented certain Improvements in Fruit-Presses, of which the following is a specification.

Figure 1 is a side elevation; and

Figure 2 is a horizontal section.

This invention relates to a press in which a double lever suspended near its middle to the lower ends of two vertical rods, and having hung to it, between said rods, the upper extremity of the plunger-rod, is employed by being vertically vibrated, to force the plunger downward into the fruit-receiver, each of the said suspending rods serving alternately as a fulcrum and as a stop to prevent the plunger from being forced upward by the reaction of the compressed material.

Referring to the drawing—

a are four uprights, placed in two pairs, which are connected by cross-girts *b* at the top and bottom, and being at a suitable distance apart, to allow the press to sit between them, the posts of each pair being also far enough asunder to admit of the introduction between them of a double lever, *c'*, placed at right angles to the sills *d*, to which the uprights are secured.

On the lower girt *b* is located the concave circular bed *c*, on which rests the cylindrical fruit-receiver *e*.

The plunger *f* is fitted to the cylinder, and is pivoted to the lower end of a vertical bar, *h*, the upper end of which is hung to a pin that passes through three parallel metal plates, *i*, placed at small intervals apart, which form the central portion of the double lever *c'*, the end pieces of the latter being connected with said plates by bands.

Into each of the spaces between the plates *i* enters one of the vertical rods *k*, to which said plates are jointed, and which, passing upward through orifices in the upper girt *b*, serve to sustain the lever *c'*.

The suspending rods *k* are so placed that the pins which pivot them to the lever are on opposite sides of the pin that pivots the bar *h* to the lever.

As the point of resistance is always the pivot of the plunger-rod, and the fulcrum of the lever is always one or the other of the pivots of the suspending rods, it is desirable, in order to obtain the greatest possible leverage, that the suspending pivots should be as near the plunger-pivot as possible, and it is for this reason that the rods *k* enter separate spaces in the lever *c'*, so that they may overlap each other.

To the under side of the upper girt *b* is secured a guide, *l*, through which the rods *k* pass, each of said rods being serrated on its outer side with downward-cut notches.

In the guide *l* are pivoted dogs *m*, the points of which fit the said notches, the outer ends of the dogs being a little higher and also a little heavier than the inner ends, so that when the rods are worked down the dogs drop into the notches and hold all that is gained by each motion of the lever *c'*.

When it is desired to raise the plunger the outer ends of the dogs are elevated by depressing levers *n* pivoted in the extremities of the upper girt and fitted so tightly in their recesses as to remain wherever placed.

On thus disengaging the dogs, the rods easily rise when lifted by the lever.

A spring-hook, *o*, secured to one side of the upper girt slips under and holds the lever, when sufficiently elevated, to make room for emptying and filling the receiver.

A block, *r*, of any suitable material, and of a length nearly equal to the distance between the pairs of posts is secured to the lever *c'*, between two of the posts on one side of the frame, which block has convex ends, that enable the lever to be vibrated without binding of the block against the pots, while, at the same time, the block prevents the lever from moving endwise, and thus drawing the suspending rods out of the perpendicular.

This machine enables the attendant to assume a natural and easy position while operating it, and works with little friction and great rapidity.

I claim as my invention—

1. The double lever *c' c'*, constructed with central longitudinal apertures, and arranged in connection with the ratchet-bars *k k* and the plunger-rod *h*, in the manner specified.

2. The combination of the lever *c'*, with the block *r*, having convex ends, and with a guide-way for said block, as described.

3. The arrangement of the ratchet-bars *k k*, guide-block *l*, dogs *m*, and weighted levers *n*, all constructed and operating substantially as set forth.

GABRIEL J. WELLS.

Witnesses:

W. A. HOUSE,

M. C. CROCKER.