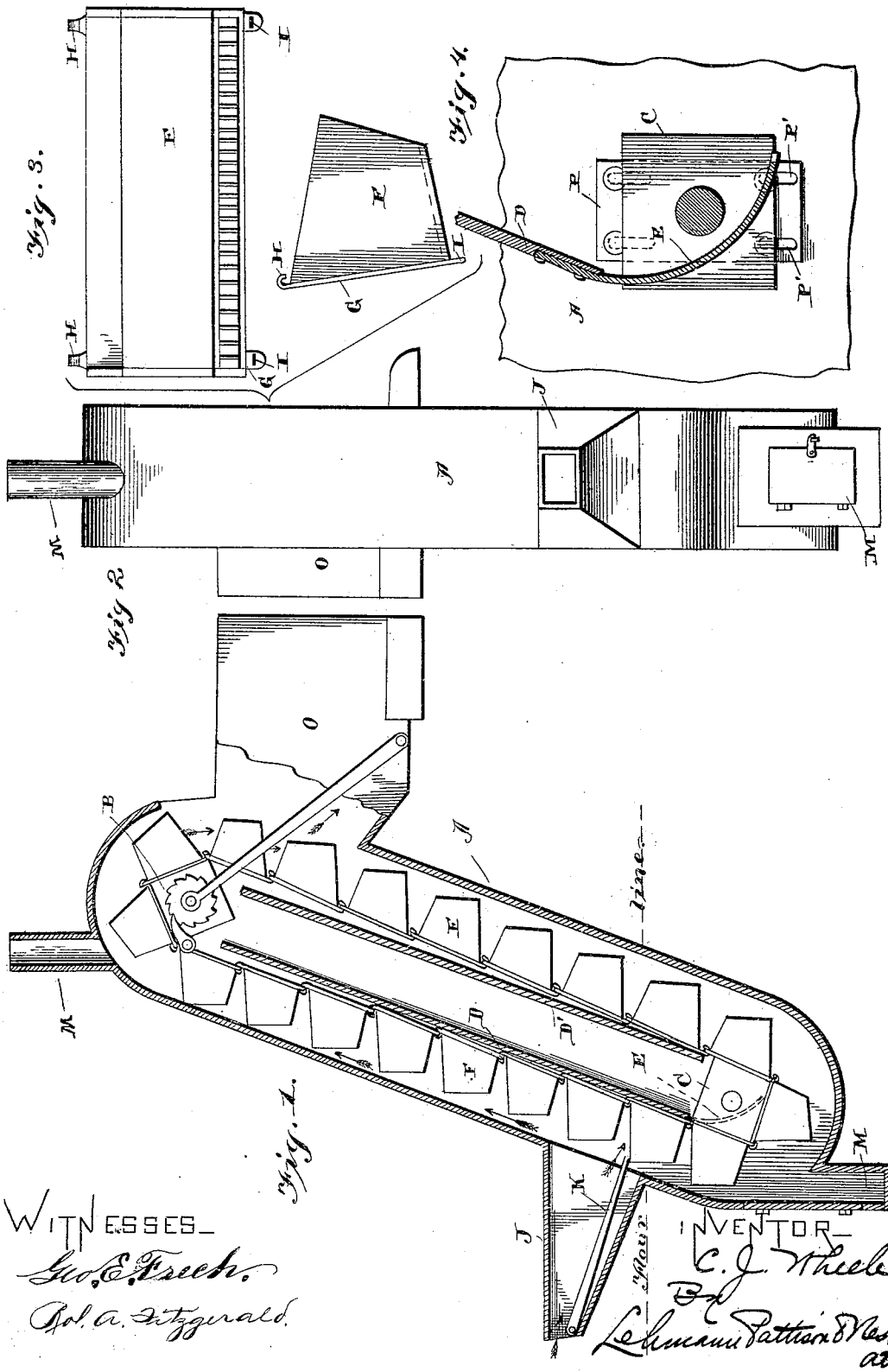
(No Model.)

# C. J. WHEELER.

## FRUIT BLEACHER.

No. 493,570. Patented Mar. 14, 1893.

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# UNITED STATES PATENT OFFICE.

CLAUDE J. WHEELER, OF WOLCOTT, NEW YORK.

## FRUIT-BLEACHER.

SPECIFICATION forming part of Letters Patent No. 493,570, dated March 14, 1893.

Application filed October 1, 1892. Serial No. 447,550. (No model.)

*To all whom it may concern:*

Be it known that I, CLAUDE J. WHEELER, of Wolcott, in the county of Wayne and State of New York, have invented certain new and useful Improvements in Fruit-Bleachers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in fruit bleachers; and it consists in the novel combination and arrangement of parts as will be fully described hereinafter, and more especially referred to in the claims.

The object of my invention is to provide an improved device for bleaching fruit, especially apples, in which the same is subjected to the action of the fumes of burning brimstone, while at the same time it is elevated so as to be fed down an incline to a slicer in a most convenient manner.

Referring to the accompanying drawings,—Figure 1 is a side elevation of my improved device, a portion of the casing being broken away. Fig. 2 is a front elevation of the lower portion of the device. Fig. 3 is a detached view of the bucket, including both a side and an end view of the same. Fig. 4 is a detached view of one of the drums.

A, designates an outer casing which preferably stands at an incline and suitably journaled in the upper end thereof is the drum B, and in its lower end the drum C. Extending between the axial points of these drums and on opposite sides thereof are the guide boards D, and D′. Secured to the lower end of the board D, is the depending shield E, which is curved as shown around the lower drum C, or rather the axle thereof.

F, indicates a series of buckets which are secured together in such a manner as to make an endless carrier and these buckets move around the drums B, and C. The said buckets are preferably made angular in form and constructed with slatted bottoms as shown. Secured to the back of each one are the parallel strips G, which are formed with hooks H, at their upper ends and openings I, at their lower depending ends. The said hooks engage the slots or openings I, of the next adjacent bucket and by this means an endless series is formed.

An inclined spout J, enters the side of the casing A, and pivotally secured at its outer end within the said spout is the trap or slide board K, the inner end of which rests on the edge of the bucket as shown. The said member K, being pivotally supported is enabled to move upward when the bucket is elevated. The series of buckets however runs upward at an incline so that they are constantly receding from the spout so that after a given height is reached the end of the slide K, drops from the bucket which has carried it upward and falls back on the next lower bucket only to have the operation repeated. By this construction a smooth slide is always in readiness to conduct the fruit into the buckets, thus constituting an automatic filler. The board D, serves as a slide for the upwardly moving loaded buckets and prevents them from sagging. The axle of the upper drum B, is provided with a crank L, for operating the device.

The shafts B, and C, are journaled at their ends in the plates P, shown in Fig. 4, which are secured to the sides of the casing. These plates are slotted near their corners as shown at P′, and through these slots pass the bolts which secure the said plates in position. By this construction I am enabled to adjust the shafts in relation to each other and thus take up any slack that may exist in the endless carrier.

At the lower end of the casing A, is a depression M, in which the burning brimstone is placed. The fumes from this burning brimstone rise between the casing side and the board D, being drawn upward by suction through the flue M, at the upper end of the casing. The fumes in rising must necessarily pass upward through the buckets F, which have slotted bottoms for the express purpose of allowing the same to penetrate them. The fruit is thus subjected to the action of the fumes and the desired effect secured. The shield E, at the lower end of the board D, prevents the fumes from entering the opposite side of the interior of the casing which is occupied by the descending empty buckets.

O, represents a bin in which the fruit is dumped from the buckets as the position of the latter is inverted while turning around

the upper drum B. As shown the outer edge of the bucket extends inward to the said bin so that the fruit dropping on its bottom from the bucket following it will roll therefrom into the bin. The inverted bottom of each bucket thus constitutes a discharging slide for the next adjacent bucket. As the bin O, is at an elevation from the floor it will be seen that a slicing device may be arranged beneath it and the fruit fed thereto by gravity.

Having thus particularly described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of a casing, drums in the opposite ends thereof an endless series of buckets adapted to move around the drums and which are subjected to the action of rising fumes, a spout in the casing, a slide pivoted at one end in the spout and adapted to engage the edges of the buckets at its opposite end, substantially as shown and described.

2. The combination of a casing, drums journaled in the upper and lower ends thereof, an endless series of buckets adapted to move around the drums and which are formed with slotted bottoms, a fume box at the lower end of the casing, a fume exit at its upper end, a spout in side of the casing, a slide pivoted at one end therein and adapted to engage the buckets at its outer end, and a discharging bin on the opposite side of the casing, substantially as shown and described.

3. The combination of a casing drums journaled therein in different vertical planes, board D, shield E, at its lower end, an endless carrier moving around said drums formed of buckets having slotted bottoms, a fume box at the lower end of the casing and a fume exit at its upper end, substantially as shown and described.

4. The combination of a casing, drums journaled therein in different vertical planes, board D, an endless carrier formed of buckets having slotted bottoms, a spout in one side of the casing, a slide pivoted at one end therein and adapted to engage the edges of the ascending buckets at its opposite end, a discharge bin at the opposite side of the casing, a fume box and a fume exit, substantially as shown and described.

5. A bucket for a device of the class described consisting of an angular receptacle having a slotted bottom, vertical strips secured to the back thereof having openings in their lower ends, and hooks formed on the upper ends of the said strips, substantially as shown and described.

6. The combination of a casing, slotted plates secured to the inner sides of the casing, securing bolts which pass through the slots of the plates, drum shafts journaled in the plates, and an endless carrier adapted to move around the said drums, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

CLAUDE J. WHEELER.

Witnesses:
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