No. 626,613. Patented June 6, 1899.

J. W. HENDRIX.

FRUIT CLEANER.

(Application filed Nov. 21, 1898.)

(No Model.)

FIG. 1.

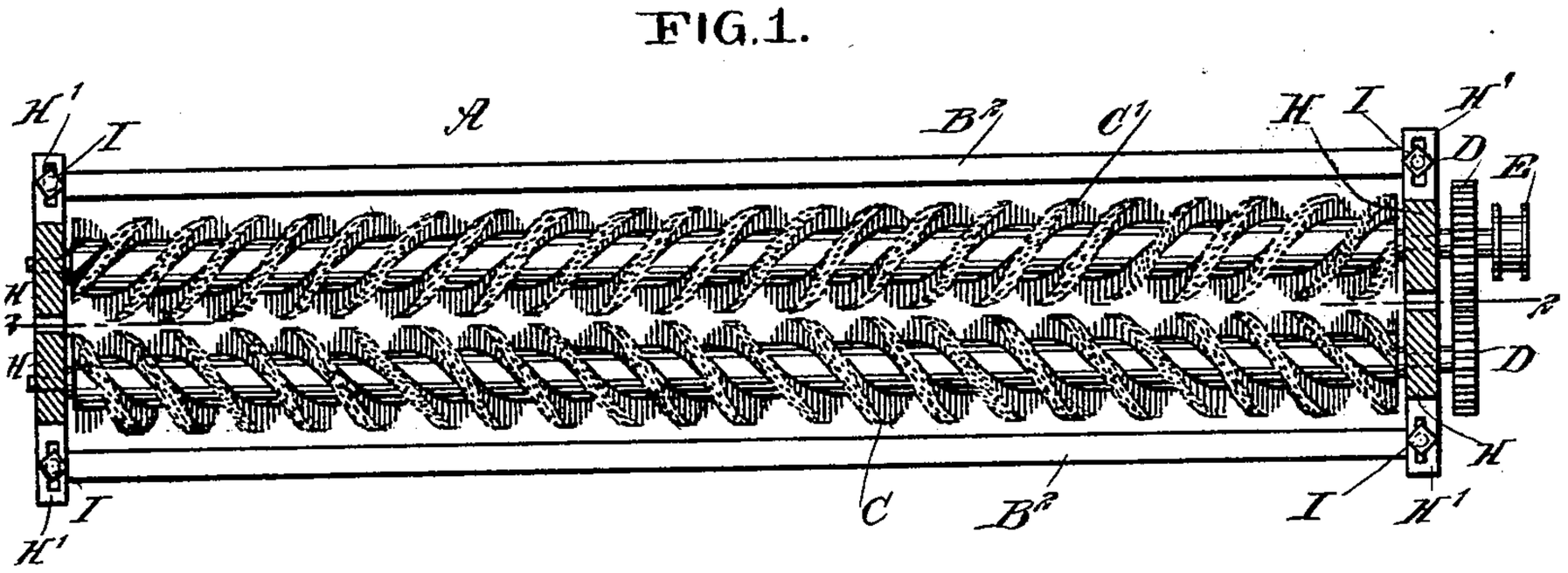


FIG. 2.

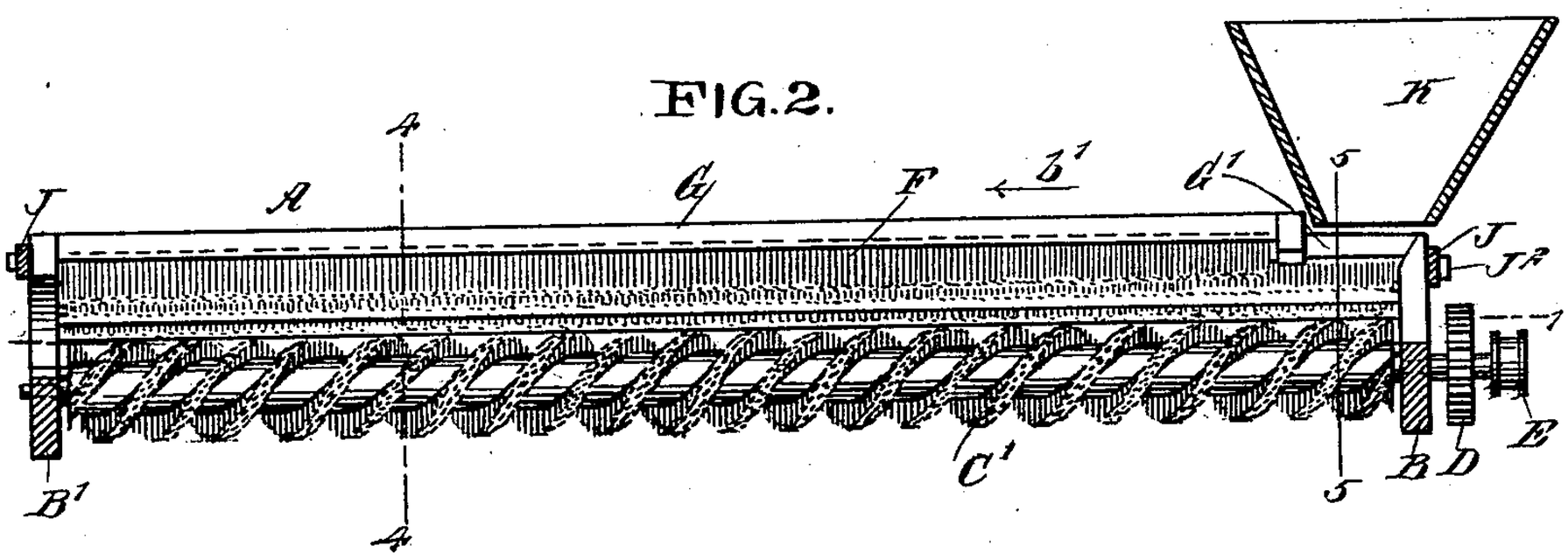


FIG. 3.

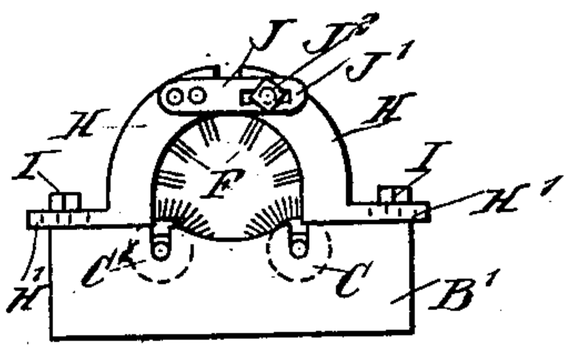


FIG. 4.

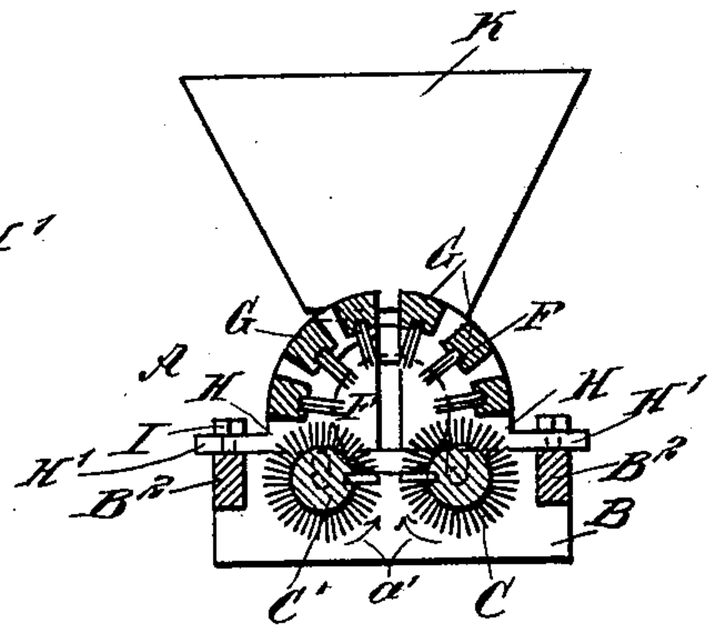
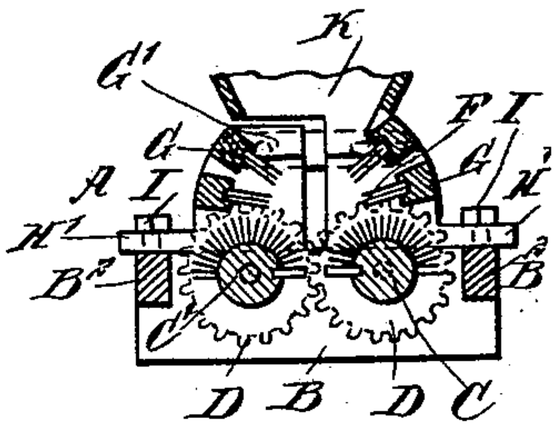


FIG. 5.



WITNESSES:

Donn Twitchell

Rev. J. Hoster

INVENTOR

J. W. Hendrix

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOEL WIGFALL HENDRIX, OF PALMETTO, FLORIDA.

FRUIT-CLEANER.

SPECIFICATION forming part of Letters Patent No. 626,613, dated June 6, 1899.

Application filed November 21, 1898. Serial No. 697,005. (No model.)

To all whom it may concern:

Be it known that I, JOEL WIGFALL HENDRIX, of Palmetto, in the county of Manatee and State of Florida, have invented a new and Improved Fruit-Cleaner, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fruit-cleaner more especially designed for thoroughly cleaning and polishing oranges without danger of bruising or otherwise injuring the same.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional plan view of the cleaner on the line 1 1 in Fig. 2. Fig. 2 is a sectional side elevation of the same on the line 2 2 in Fig. 1. Fig. 3 is an end view of the discharge end of the cleaner. Fig. 4 is a transverse section of the cleaner on the line 4 4 in Fig. 2, and Fig. 5 is a similar view of the same on the line 5 5 in Fig. 2.

The improved fruit-cleaner is provided with a casing A, having the end pieces B B′, rigidly connected with each other by longitudinally-extending rails B^2, as is plainly shown in Figs. 1, 4, and 5. In the ends B and B′ are journaled spiral roller-brushes C C′, connected with each other outside of the end B by gear-wheels D, so that the two brushes rotate in unison and in the direction of the arrows a', as indicated in Fig. 4. On the shaft of one of the brushes is secured a pulley E, connected by belt with other machinery for imparting a rotary motion to the pulley to drive the two brushes in unison, as before mentioned. It will be understood, however, that instead of the pulley a crank-arm may be applied to the shaft to actuate the cleaner by hand. The two roller-brushes C C′ are arranged alongside each other, and above the roller-brushes are arranged brushes F, secured or formed on longitudinally-extending bars G, secured at their ends to the sectional heads H, held transversely adjustable on the end pieces B B′, so as to bring the brushes F nearer to or farther from each other, according to the size of the oranges or other fruit to be cleaned or polished.

The longitudinal rails or bars G are arranged in a semicircle, as indicated in Fig. 4, and the brushes F extend in a radial and inward direction from said side bars to readily engage the tops and a portion of the side surfaces of the oranges as they pass through the machine, said oranges being moved along by the spiral roller-brushes C C′.

In order to make the heads adjustable, I provide the same with slotted flanges H′, engaged by bolts I, secured to the corresponding end piece B or B′, so that when the bolts are loosened the said heads may be shifted toward or from each other to bring the brushes F into the proper position for cleaning large or small fruit. The bolts I are then screwed up to secure the heads in place. After the desired adjustment is made between the heads H at each end piece B or B′ of the casing said heads are connected with each other by a bar J, secured to one of the heads and extending upon the other head to receive in the slot J′ of this latter end a bolt J^2, attached to the other head, as illustrated in Fig. 3.

The top bars G at or near the end piece B are cut out or reduced to form an inlet-opening G′ for the fruit contained in a hopper K, the lower end of which opens into said inlet-opening G′, as is plainly illustrated in Figs. 2 and 5. The hopper K is preferably fastened to one set of bars G, as indicated in Fig. 5.

The heads H at the lower end of the casing are made segmental, as is plainly illustrated in Fig. 3, so that the oranges or other fruit can readily pass out of the casing at this end of the machine.

When the roller-brushes are rotated and the oranges pass from the hopper K one by one into the casing, they are carried forward in the direction of the arrow b' by the action of the spirally-arranged bristles of the brushes C C′, and at the same time the oranges are turned over and are engaged at the top and sides by the brushes F, so that a thorough brushing, cleaning, and polishing of the fruit takes place. By having the brushes F adjustable in the manner described the machine can be readily used for cleaning and polishing large or small sized fruit.

Having thus fully described my invention,

I claim as new and desire to secure by Letters Patent—

1. A fruit-cleaner comprising a casing, a pair of spiral roller-brushes journaled in said casing, longitudinal bars arranged over said rollers and having brushes extending toward said roller-brushes, to engage the fruit at the top and sides while it is carried forward by the roller-brushes, and sectional heads carrying said bars, and having their sections transversely adjustable on said casing, substantially as shown and described.

2. A fruit-cleaner comprising a casing, a pair of spiral roller-brushes journaled in said casing, longitudinal bars arranged over said roller-brushes and having brushes extending toward the said roller-brushes, to engage the fruit at the top and sides while it is carried forward by the roller-brushes, and sectional heads carrying said bars, and having their sections transversely adjustable on said casing, one of the heads being formed with a discharge-opening for the fruit, and a hopper carried by the other head, substantially as shown and described.

3. In a cleaner, the combination of two spiral roller-brushes mounted in parallelism to each other, means for driving the brushes in unison, and a series of longitudinal bars located over the roller-brushes and adjacent to each other to form a casing through which the material cleaned is passed, the bars being provided with bristles projecting inwardly toward the roller-brushes.

JOEL WIGFALL HENDRIX.

Witnesses:
HARRY WADHAM,
W. B. WHITEHEAD.