

(No Model.)

2 Sheets—Sheet 1.

H. BARDSLEY & W. PARKINSON.

FRUIT CLEANER.

No. 482,937.

Patented Sept. 20, 1892.

Fig. 1

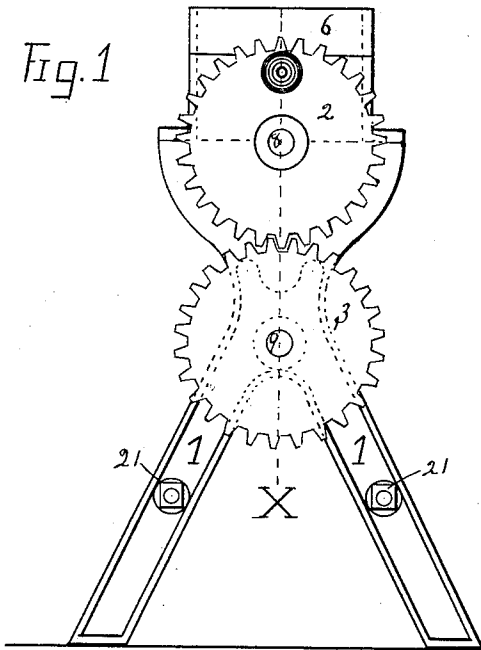


Fig. 2

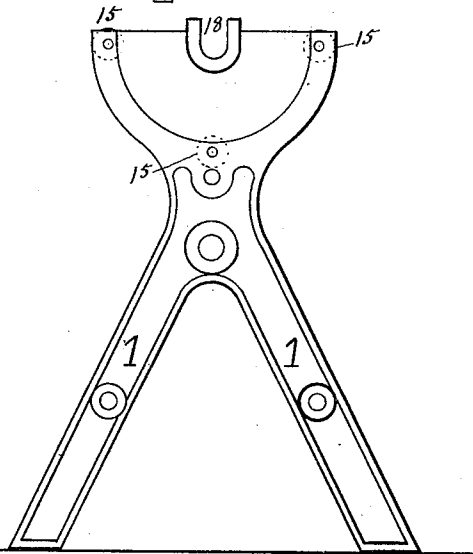
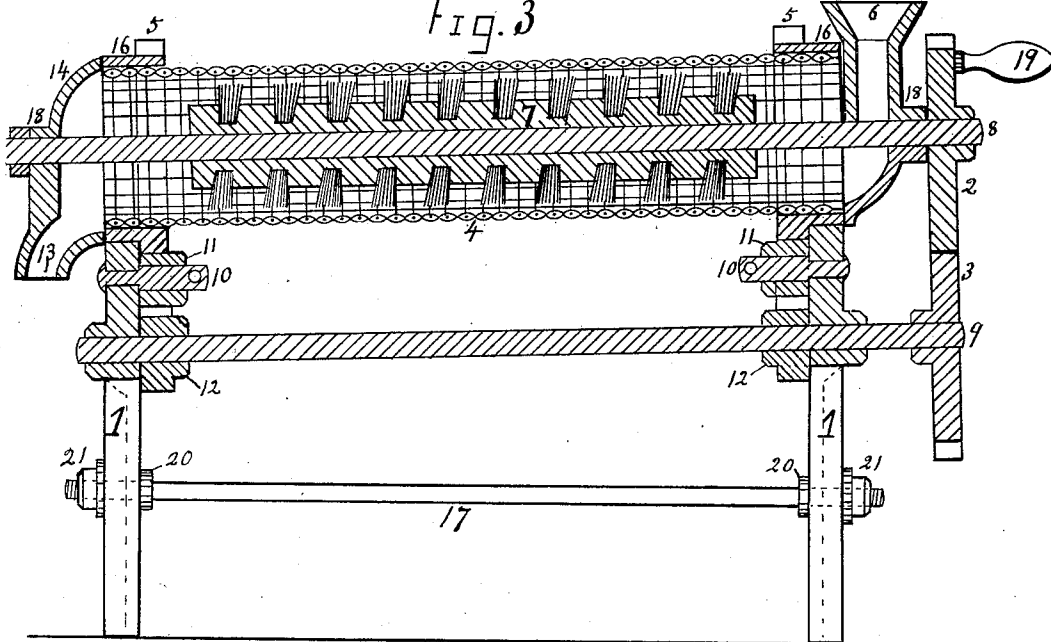


Fig. 3



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(No Model.)

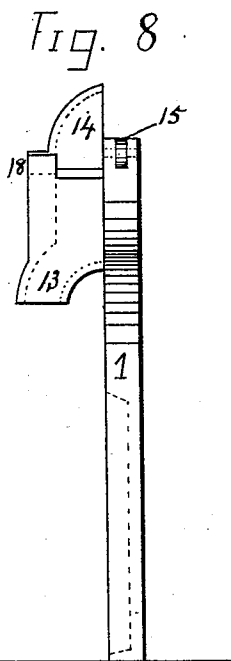
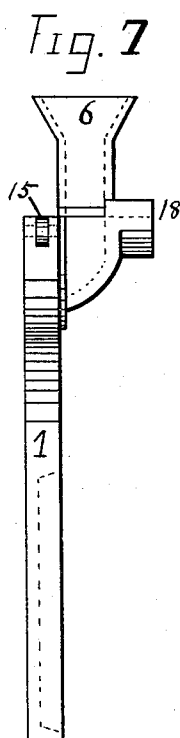
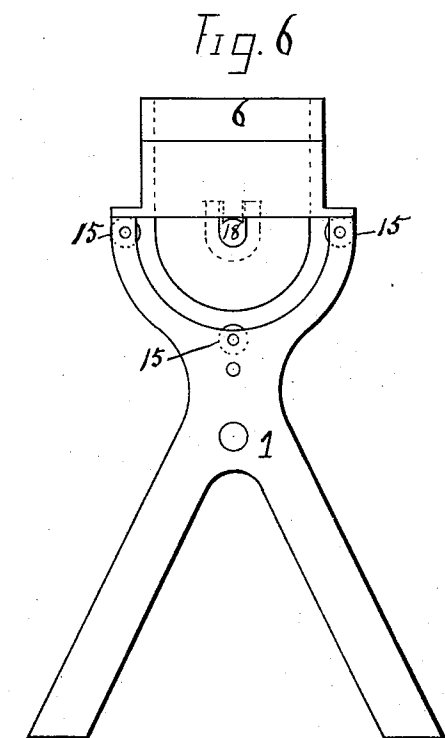
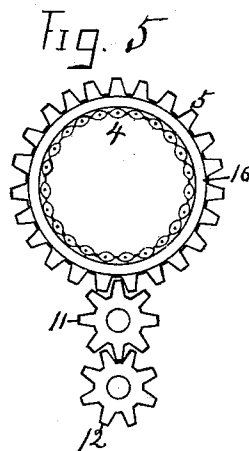
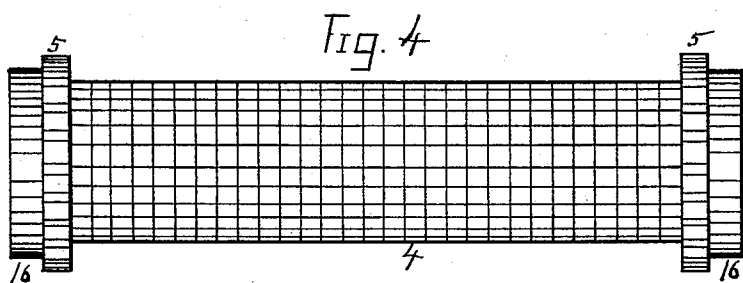
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UNITED STATES PATENT OFFICE.

HENRY BARDSLEY AND WALTER PARKINSON, OF PHILADELPHIA, ASSIGN-
ORS OF ONE-THIRD TO JAMES BARDSLEY, OF LYNDELL, PENNSYLVANIA.

FRUIT-CLEANER.

SPECIFICATION forming part of Letters Patent No. 482,937, dated September 20, 1892.

Application filed April 18, 1892. Serial No. 429,557. (No model.)

To all whom it may concern:

Be it known that we, HENRY BARDSLEY and WALTER PARKINSON, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have jointly invented a new and useful Improvement in Fruit-Cleaners, of which the following is a specification.

Our invention relates to machines for cleaning fruit, especially dried fruit, such as currants and raisins; and its object is to remove dirt, loose stems, and to brush and polish the fruit and give it a clean and bright appearance, which increases the value and selling qualities; and our invention consists in a combination of elements shown in the drawings, described in the specification, and specified in the claim. To attain these objects we construct the machine as illustrated in the accompanying drawings, in which—

Figure 1 is an end view of our improved machine. Fig. 2 is an end view with the driving gear-wheels removed. Fig. 3 is a sectional side elevation of the machine, taken through the line X, Fig. 1. Fig. 4 is a side elevation of the screen. Fig. 5 is an end view of the screen and cog-gearing for driving the same. Fig. 6 is an end view of the frame and hopper. Fig. 7 is an edge view of Fig. 6. Fig. 8 is an edge view of the left-hand end of the machine-frame, showing the discharge-pipe and the movable end cover.

Similar numerals refer to similar parts throughout the several views.

1 represents the frame ends of the machine, which are made of cast-iron in form as shown in Figs. 2, 6, 7, and 8. These ends are connected by two brace-rods 17. These rods have fixed collars 20 and screw-nuts 21. (See Fig. 3.) In each end frame are fitted three small friction-rollers 15. (See Fig. 6.)

4 represents the wire screen, which is made of woven wire, with about ten wires per inch each way. On each end of the screen is a hoop having a tread 16 and spur-gear 5. These hoops are fastened to the wire-cloth by soldering or otherwise.

7 represents a spiral brush, which we prefer to make on a wooden drum and of good brush-bristles. The wooden drum in which are fixed the bristles forming the brush is mounted on an iron shaft 8, which shaft 8

rests and revolves in the bearings 18 of the frame 1. On the end of shaft 8 is fixed a spur-wheel 2. This wheel gears into and drives a spur-wheel 3, fixed on shaft 9. This shaft 9 carries two spur-pinions 12, which gear into two carrier-pinions 11, working on studs 10. The pinions 11 gear into and drive the gears 5, fixed to the screen 4. The treads 16 of hoops rest on the friction-rollers 15.

The hopper 6 and end cover 14 are made light, of cast-iron, separated, and are detachable from the ends 1.

Currants, raisins, or other small dried fruits to be cleaned are fed into the hopper 6, when motion is given by the handle 19, revolving the spiral brush and the cog-gears 2, 3, 12, 11, and 5. The screen revolves slowly and in opposite direction from that in which the brush revolves. The brush will rub the fruit against the openings in the screen, loosen the dirt, discharge it and the stems through the screen, and the rubbing of the fruit against the wire screen will brighten as well as clean it. The spiral form of the brush will cause the fruit to work to the left-hand end of the machine, where the clean fruit will be discharged from the spout 13. The fruit may be discharged into a box or basket.

If desired, a box may be placed under the machine to catch the dirt and loose stems.

When using the machine, the brush and screen will become foul with dirt and require washing. To take out the screen and brush, remove the hopper 6 and end cover 14, which is done by simply raising them out of the bearing-sockets 18, when the shaft 8, with brush and screen, may be lifted out of the machine. The brush is then drawn from the screen, when the screen and brush may be washed. The brush after cleaning is placed in the screen and the shaft dropped in the bearings 18, the hopper 6 and end cover 14 put in place, and the machine is ready for use.

Having as above fully described the construction and operation of our improved fruit-cleaning machine, what we claim as new, and desire to secure by Letters Patent, is—

In a fruit-cleaning machine, the combination of a tubular wire screen, provided at the ends with hoops, each hoop formed with a supporting-tread and projecting gear-teeth, a frame at the ends, with stationary receiving

and discharge heads for said screen and with
bearings for treads, a central shaft provided
with a driving crank-pinion and a spiral
brush within said screen a counter-shaft pro-
5 vided with pinions, one of which directly en-
gages the crank-wheel, and two carrier-pin-
ions transmitting motion to the screen to re-
volve it in an opposite direction to that which

the spiral brush revolves, substantially as set
forth.

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Witnesses:

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