B. W. SCOTT.

PRUNE PITTING MACHINE.

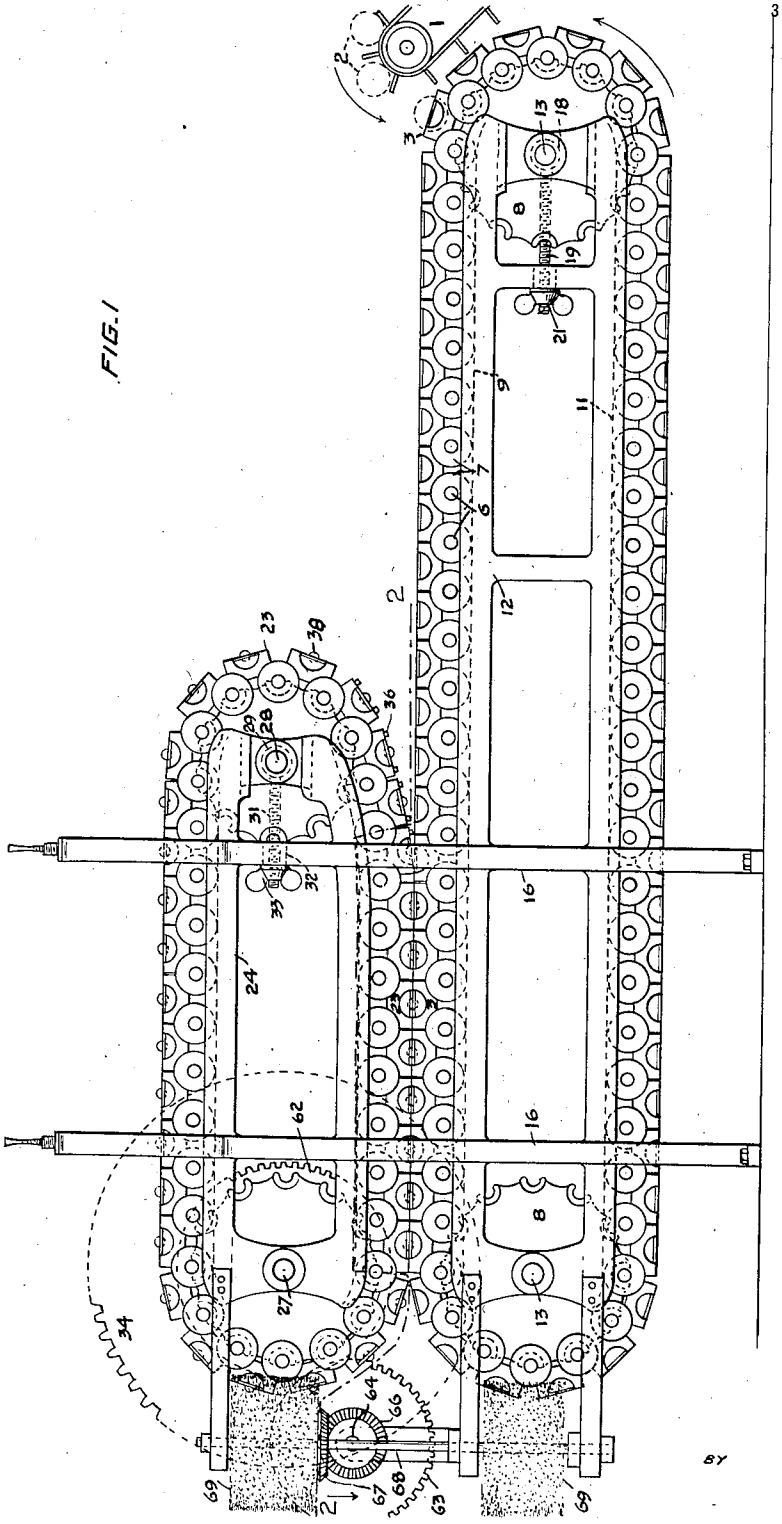
APPLICATION FILED OCT. 9, 1919.

1,329,023.

Patented Jan. 27, 1920.

3 SHEETS—SHEET 1.

FIG. 1



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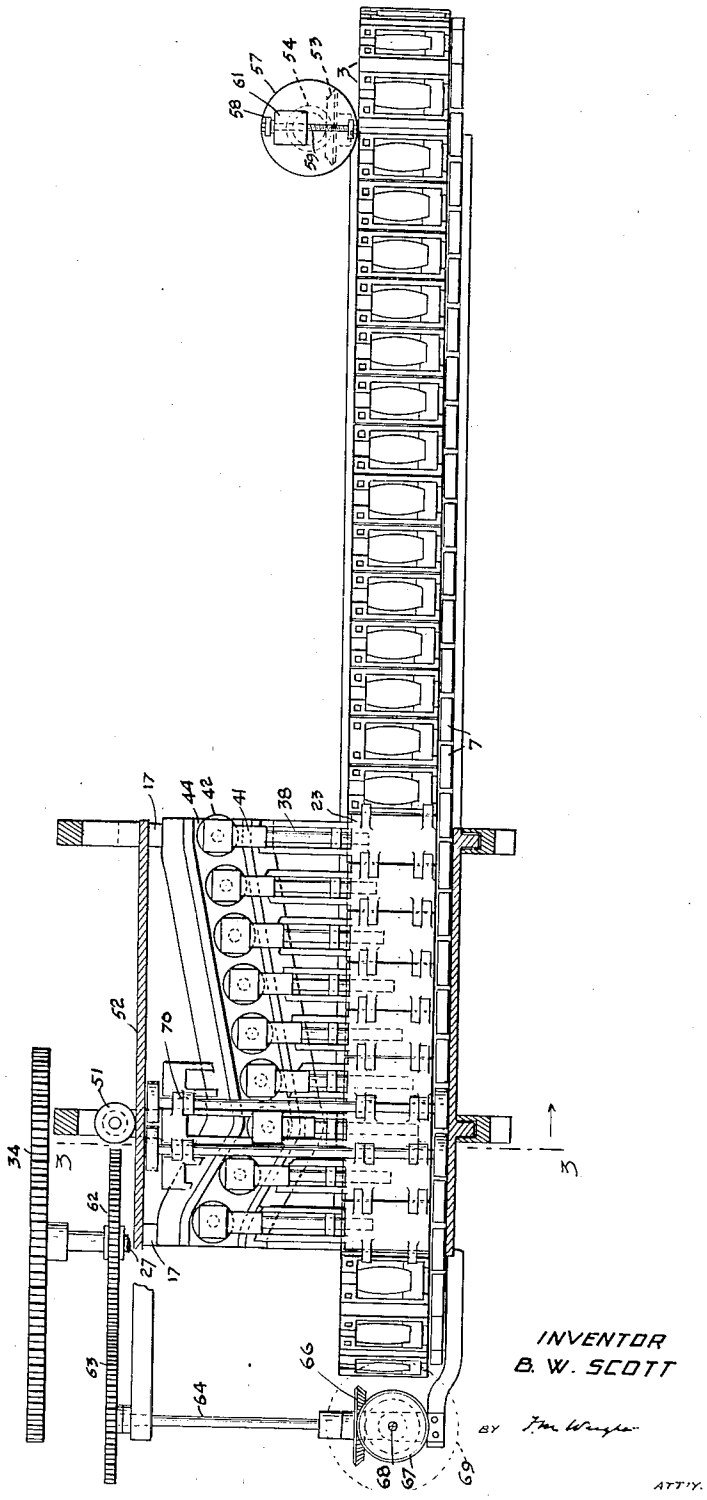
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3 SHEETS—SHEET 2.

FIG 2



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3 SHEETS—SHEET 3.

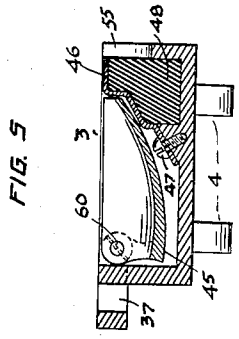


FIG. 5

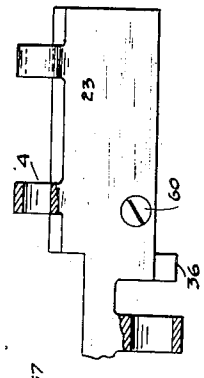


FIG. 6

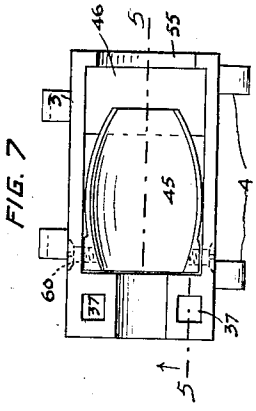


FIG. 7

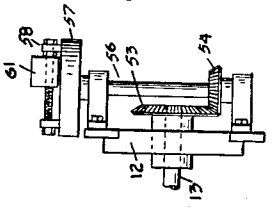


FIG. 4

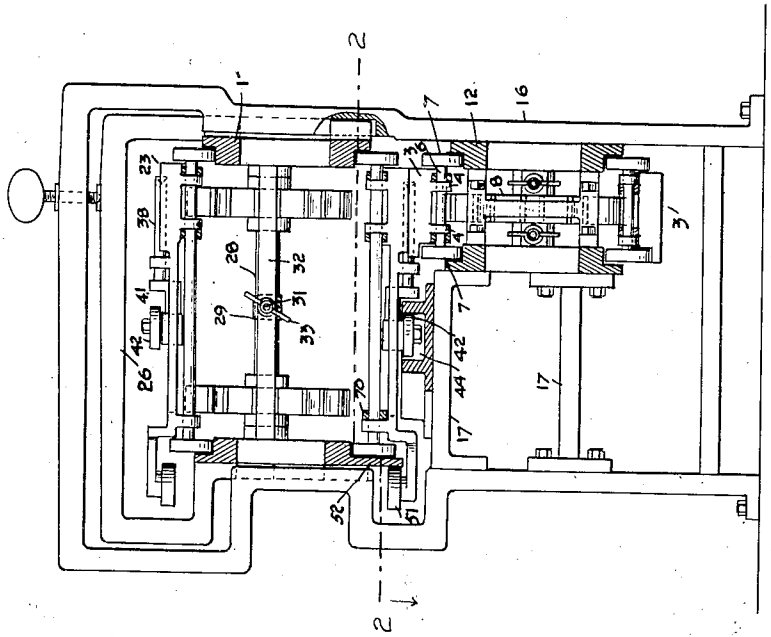


FIG. 3

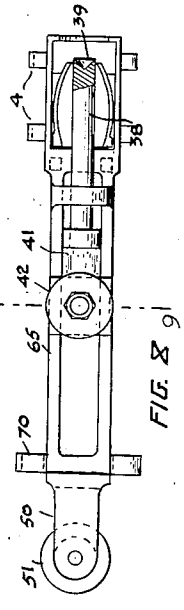


FIG. 8

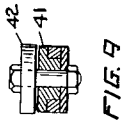


FIG. 9

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UNITED STATES PATENT OFFICE.

BARTON W. SCOTT, OF SAN JOSE, CALIFORNIA.

PRUNE-PITTING MACHINE.

1,329,023. Specification of Letters Patent. Patented Jan. 27, 1920.

Application filed October 9, 1919. Serial No. 329,450.

To all whom it may concern:

Be it known that I, BARTON W. SCOTT, a citizen of the United States, residing at San Jose, in the county of Santa Clara and State of California, have invented new and useful Improvements in Prune-Pitting Machines, of which the following is a specification.

The present invention relates to improvements in prune pitting machines, the object of the invention being to provide such a machine which will pit prunes continuously and rapidly for an indefinite period of time.

In the accompanying drawings, Figure 1 is a side view of my improved prune pitting machine; Fig. 2 is a broken sectional view on the line 2—2 of Fig. 1; Fig. 3 is a vertical section on the line 3—3 of Fig. 2; Fig. 4 is a side view of a detail; Fig. 5 is a vertical section of a lower prune holder section; Fig. 6 is a side elevation of an upper prune holder section; Fig. 7 is a plan view of a lower prune holder section; Fig. 8 is a bottom plan of an upper prune holder section showing also a punch and mechanism for operating the same; Fig. 9 is a section on the line 9—9 of Fig. 8.

Referring to the drawings, 1 indicates an elevator for delivering prunes, shown at 2, into lower sections 3 of prune holders. Each section 3 is, as shown in detail in Figs. 5 and 7, of a general box-shaped form, open at its top and provided at the bottom (see Fig. 3) with a pair of eyes 4, which are adapted to register with a pair of similar eyes on the adjacent section to receive a hinge pin 6, upon which are mounted rollers 7 which travel around sprocket wheels 8 and roll upon upper and lower tracks 9, 11, in a frame 12, supporting shafts 13 for said sprocket wheels 8. One side of the frame 12 is secured to sides of U-shaped standards 16, and the other side of the frame 12 is secured to ends of intermediate pieces 17, the other ends of which are secured to other sides of said standards. The shaft of one of said sprocket wheels carries collars 18, which are engaged by screws 19 screwed through a cross member of the frame 12, lock nuts 21 being screwed on said shafts. By this means the sprocket wheel is supported on the shaft at a greater or less distance from the other sprocket wheel and the endless belt of prune holder sections can be tightened or loosened as desired.

The prunes dropping in succession from said elevator into said prune holder sections are carried thereby (the endless belt of prune holder sections being moved by means to be presently described) beneath a second belt of upper prune holder sections 23 constructed similarly to the lower prune holder sections and traveling around a frame 24, supported by a U-shaped frame 26. In said frame are pivotally mounted shafts 27, 28, and the shaft 28 has a collar 29 around it pressed by a screw 31 screwed through a cross member 32 of said frame and locked by a lock nut 33. The upper endless belt of prune holder sections derives its motion from a gear wheel 34 on the shaft 27 of one of the sprocket wheels and the lower endless belt is moved with the upper belt through the medium of pins 36 extending from the bottom of the upper prune holder sections into sockets 37 in the upper portion of the lower prune holder sections. The upper prune holder sections are held tightly against the lower prune holder sections by means of screws screwed through the tops of the U-shaped standards 16 and pressing downward upon the U-shaped frame 26.

One end of each prune holder section is formed with a semi-circular recess to receive a pitter 38 which is of a general cylindrical form and has a conical recess 39 at its advancing end. These pitters are carried around with the upper prune holder sections and are formed with angular heads 41 carrying rollers 42 guided in a guideway 65 extending from the upper prune holder section. Said rollers 42 enter a cam groove 44 which inclines, first toward the prune holder and then away therefrom, as clearly shown in Fig. 2, and is secured upon the upper intermediate piece 17 of the U-shaped standards 16. By passage along said cam groove, the pitter is pushed inward and its advancing end enters the prune, which is held between spoon shaped containers 45, hereinafter termed spoons, pivoted, as shown at 60, at the near end to the prune holder sections, the small ends of said spoons 45 resting upon a sheet 46 of thin leather secured at one end by a screw 47 to the bottom of the holder and resting upon a very soft rubber block 48 conformed to fit closely around the smaller end of the spoon 45. By the passage of the pitter through the prune, the pit is removed therefrom, and the rubber blocks in the upper and lower prune holder sections permit the free ends of the spoons to separate from

one another, and also permit the pits to be discharged through semi-circular recesses 55 in the prune holder sections from the prunes, while the prunes are retained in the spoons. The upper prune holder sections are extended, as shown at 65 and carry eyes 70 which register with similar eyes on adjacent prune holder sections to receive the hinge pins 6 of the upper prune holder sections, and are further extended, as shown at 50, and carry rollers 51 which bear against a wall-like extension 52 from the upper frame, to resist the thrust of the prune upon the upper section when the pit is being driven out therefrom.

The shaft of the sprocket wheel at the end at which the prunes are discharged upon the endless belt of prune holder sections carries a bevel gear 53 which meshes with a pinion 54 on a suitably mounted vertical shaft 56 carrying a plate 57 which supports bearings 58, in which can rotate a screw 59 carrying a weight 61. By turning said screw, said weight may be shifted to be more or less eccentric to the plate, so that, as said plate is rotated, said weight, being eccentric thereto, imparts vibration to the endless belt of prune holder sections and causes the prunes to settle down into the proper positions in the lower prune holder sections.

The shaft of the sprocket wheel at the advancing end of the upper endless belt of prune holder sections carries a gear wheel 62 which meshes with a gear wheel 63 on a shaft 64, which carries a bevel gear 66, which meshes with a bevel gear 67 suitably mounted on a vertical shaft 68 which carries upper and lower brushes 69, which brush the upper and lower endless belts and remove from the spoons any pulp or pits which may have remained therein.

While I have in the claims referred to the machine as for pitting prunes, it is to be understood that I only use the word "prunes" for the sake of brevity and conciseness and that any other fruit which can be pitted in like manner with the prunes is intended to be included by the claims.

I claim:—

1. In a prune pitting machine, the combination of prune holder sections, spoon-shaped containers in said prune holder sections, a pitter adapted to pass longitudinally through said sections, said containers being open at the top end and pivoted to swing upon their rear ends, and means for resiliently supporting the front ends of said containers, said prune holder sections being formed at the front ends with recesses to permit the pit to pass therethrough.

2. In a prune pitting machine, the combination of prune holder sections, spoon-shaped containers in said prune holder sections, a pitter adapted to pass longitudinally through said sections, said containers being open at the top end and pivoted to swing upon their rear ends, and means for resiliently supporting the front ends of said containers, and a sheet of flexible material secured in position over said resilient means, said prune holder sections being formed at the front ends with recesses to permit the pit to pass therethrough.

3. In combination with an endless belt of lower prune holder sections, means for delivering prunes thereon, a second endless belt of upper prune holder sections, means for causing the first prune holder belt sections to register with those of the lower, pitters moving transversely to the direction of movement of said sections, and a channel for guiding said pitters in their transverse movement.

4. In a prune pitting machine, the combination of an endless belt of lower prune holder sections, an endless belt of upper prune holder sections, frames about which said belts travel, means for moving said endless belts, means for pressing the frame of the belt of the upper prune holder sections toward the frame of the belt of the lower prune holder sections, means for moving said upper and lower prune holder sections in registry with each other, said upper and lower prune holder sections having at one end registering recesses to receive a pitter and at the other end registering recesses to permit the pit to be projected therethrough, a pitter movable transversely through said prune holder sections, and means actuated with the movement of said sections for moving said pitter transversely.

5. In a prune pitting machine, the combination of an endless belt of lower prune holder sections, an endless belt of upper prune holder sections, frames about which said belts travel, means for moving one of said endless belts, means for pressing the frame of the belt of the upper prune holder sections toward the frame of the belt of the lower prune holder sections, coöperating means in the upper and lower prune holder sections for moving said upper and lower prune holder sections in registry with each other, said upper and lower prune holder sections having at one end registering recesses to receive a pitter and at the other end registering recesses to permit the pit to be projected therethrough, a pitter movable transversely through said prune holder sections, and means actuated with the movement of said sections for moving said pitter transversely.

6. In a prune pitting machine, the combination of a feeder for feeding prunes to the machine, an endless belt of lower prune holder sections to which the prunes are successively fed, an endless belt of upper prune holder sections, frames about which said belts travel, means for moving one of said

endless belts, means for pressing the frame of the belt of the upper prune holder sections toward the frame of the belt of the lower prune holder sections, coöperating means in the upper and lower prune holder sections for moving said upper and lower prune holder sections in registry with each other, said upper and lower prune holder sections having at one end registering recesses to receive a pitter and at the other end registering recesses to permit the pit to be projected therethrough, a pitter movable transversely through said prune holder sections, and means actuated with the movement of said sections for moving said pitter transversely.

7. In a prune pitting machine, the combination of a feeder for feeding prunes to the machine, an endless belt of lower prune holder sections to which the prunes are successively fed, an endless belt of upper prune holder sections, frames about which said belts travel, means for moving one of said endless belts, means for pressing the frame of the belt of the upper prune holder sections toward the frame of the belt of the lower prune holder sections, coöperating means in the upper and lower prune holder sections for moving said upper and lower prune holder sections in registry with each other, said upper and lower prune holder sections having at one end registering recesses to receive a pitter and at the other end registering recesses to permit the pit to be projected therethrough, a pitter movable transversely through said prune holder sections, means actuated with the movement of said sections for moving said pitter transversely, each prune holder section comprising a spoon shaped container pivoted at its rear end, a resilient support for the front end of said container, and sheet material interposed between the front end of the spoon shaped container and the resilient support.

8. In combination with endless belts of prune holder sections, means for delivering prunes into the sections of one of said belts, means for causing the sections of one of said belts to register with the other, pitters moving transversely to the direction of movement of said sections, and brushes for cleaning said sections.

9. In combination with endless belts of prune holder sections, means for delivering prunes into the sections of one of said belts, means for causing the sections of one of said belts to register with the other, pitters moving transversely to the direction of movement of said sections, rotary brushes for cleaning said sections, and means for rotating said brushes with the movement of said belts.

BARTON W. SCOTT.