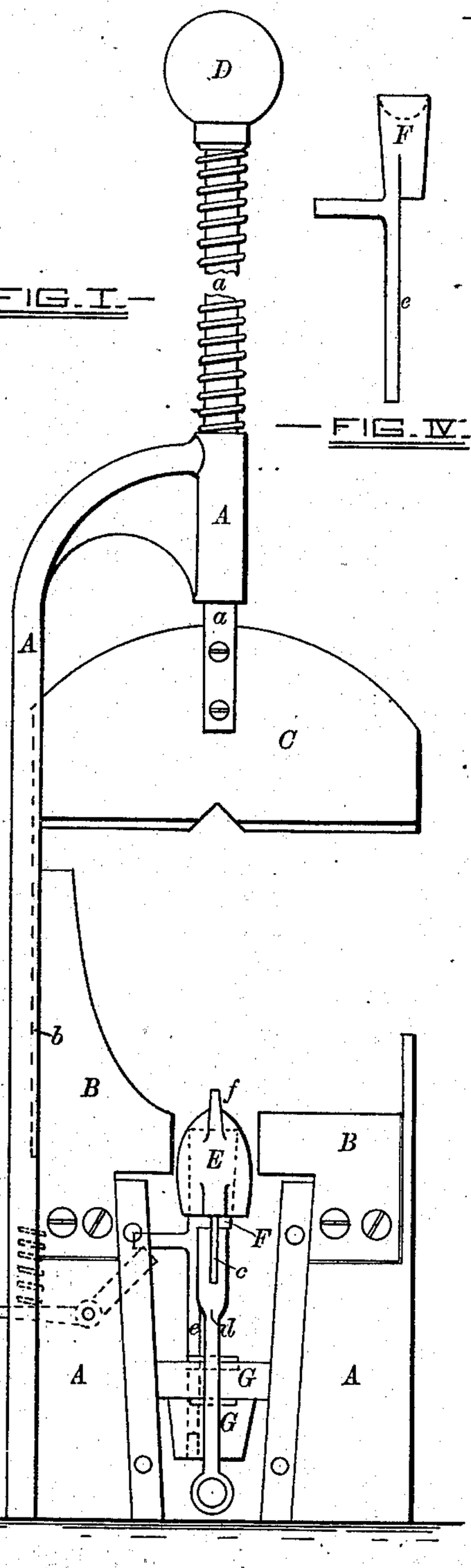
(Model.)

P. F. WINEBRENNER & W. G. SUYDAM.

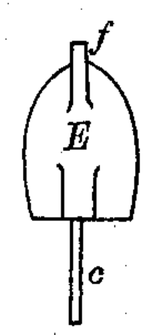
Fruit Stoner.

No. 239,586. **Patented March 29, 1881.**

— FIG. I. —

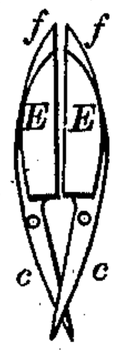


— FIG. IV. —



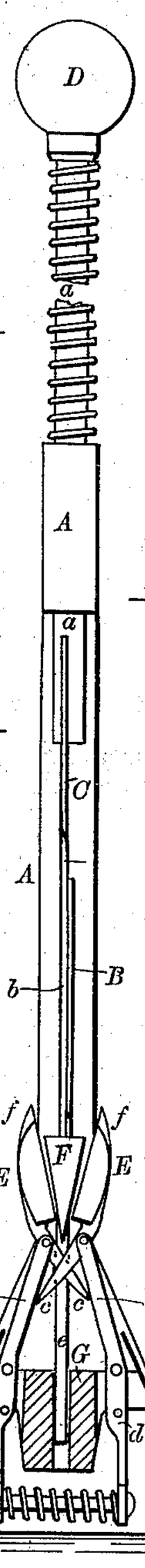
— FIG. V. —

— FIG. VI. —



— FIG. III. —

— FIG. II. —



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UNITED STATES PATENT OFFICE.

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FRUIT-STONER.

SPECIFICATION forming part of Letters Patent No. 239,586, dated March 29, 1881.

Application filed August 23, 1880. (Model.)

To all whom it may concern:

Be it known that we, PETER FORNEY WINEBRENNER, of the city of Baltimore and State of Maryland, and WILLIAM G. SUYDAM, of Newark, in the county of Essex and State of New Jersey, have invented an Improved Machine for Stoning Fruit, of which the following is a specification; and we do hereby declare that in the same is contained a full, clear, and exact description of our said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Our invention relates to a machine of the above-named class in which the fruit to be stoned is forced by means of suitable mechanism between two spoon-shaped devices, which automatically close around the stone and remove it from the pulp, which is severed into halves, but not otherwise changed in shape.

Our improved machine consists of a lower stationary knife confined in a suitable frame, and an upper one adapted to be forced toward the edge of the fixed knife aforesaid. Within a notch or slot in the central portion of the lower fixed knife are confined the spoon-shaped devices before alluded to, which are secured to the end of a pair of levers pivoted to spring-holders. A yielding seat for the stone is inclosed by the said spoons and supported by the levers of the same, which are crossed at a point slightly below the spoons. The stone seat is depressed by the downward action of the upper knife upon the stone, and in its movement the spoons are closed around the said stone and sever it from the pulp, as before stated.

In the further description of our said invention which follows, reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure I is a side view of the improved machine with a portion of the same removed to show the interior mechanism. Fig. II is a vertical section of the machine. Figs. III, IV, V, and VI are views of parts of the machine, as hereinafter described.

Similar letters of reference indicate similar parts in all the views.

In the said drawings, A is the frame or stand of the machine, in which is secured the lower fixed knife, B.

C is the upper movable knife, supported by a stem, *a*, having a handle, D, at its upper end. The normal position of the upper knife is an elevated one, and is maintained through the agency of a spiral spring coiled around the stem and confined endwise between the handle D and the upper part of the frame A. One edge of the movable knife C is inserted in a slot, *b*, in a part of the frame A, in order to prevent the twisting or turning of the said knife in its downward motion.

The central portion of the lower fixed knife is removed to give space for the operation of the spoons E, which are adapted to be opened and closed. The said spoons are formed on or secured to the upper end of the crossed levers *c*, which are pivoted to the spring-supports *d*, confined in any suitable manner in the frame A.

The stone-seat before alluded to, and which is represented by F, consists of a cup-shaped device having a stem, *e*, which extends into a block, G, forming a part of the frame A. The stone-seat is wedge-shaped at its under side, and rests on the crossed levers *c*, which support it, and the stem *e* has a projection on one side thereof, whereby the stone-seat is elevated independently of the crossed levers through the agency of a lever, H.

Parts of the invention not yet alluded to will be described and their uses fully set forth in the description of the operation of stoning fruit by means of our improved machine which follows.

Supposing a peach is to be stoned, it is stuck on the projecting ends of the spoons E, which are provided with horns or pointed projections *f*, to hold the fruit prior to the stoning operation and guide the stone between the spoons. At the beginning of the stoning operation the spoons are nearly closed against the lower fixed knife with the stone-seat elevated, as shown in Fig. 3 of the drawings. The upper knife is now forced down, and the center portion thereof, which is notched, presses upon the stone, while the sharpened edge of the said knife at either side of the notch cuts the pulp of the peach. As the stone and its seat continue to

descend, the latter forces apart the crossed levers *c*, which has the effect of bringing the spoons into close contact with the stone and stripping the pulp from the same. The upper knife is now allowed to ascend, when the stone is projected from between the spoons by the lever H, which has a spring action. The object in pivoting the spoons to spring-supports, as shown, is to make the said spoons less rigid in their movement, and to provide for inequalities in the size and shape of stones, as will be readily understood.

Figs. V and VI are exterior views of a spoon and its lever detached from the other mechanism, and Fig. IV is an exterior view of the stone-seat.

We claim as our invention—

1. In a machine for stoning fruit, a pair of spoon-shaped knives or devices placed opposite to each other and pivoted to a frame or support, a vertically-moving stone-seat situated between the said spoons and adapted in its depression to effect the closing of the spoons, and a device for forcing the stone of the fruit between the spoons and upon the stone-seat, all combined substantially as herein specified.

2. In a machine for stoning fruit, a pair of pivoted spoon-shaped devices secured to the ends of supported levers, which are crossed below the spoons and in a vertical line running centrally between the said spoons, a vertically-moving stone-seat resting on the crossed levers, and a device for forcing the stone of the fruit between the spoons and upon the said stone-seat, all combined substantially as herein specified.

3. In a machine for stoning fruit, a fixed knife secured to a frame or stand, a pair of spoon-shaped devices situated in a notch or opening in the said knife and projecting from the ends of cross-levers, a vertically-moving stone-seat resting on the said crossed levers, and a vertically-moving knife adapted to be forced to the fixed knife and between the spoon-shaped devices to the stone-seat, all combined substantially as herein specified.

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