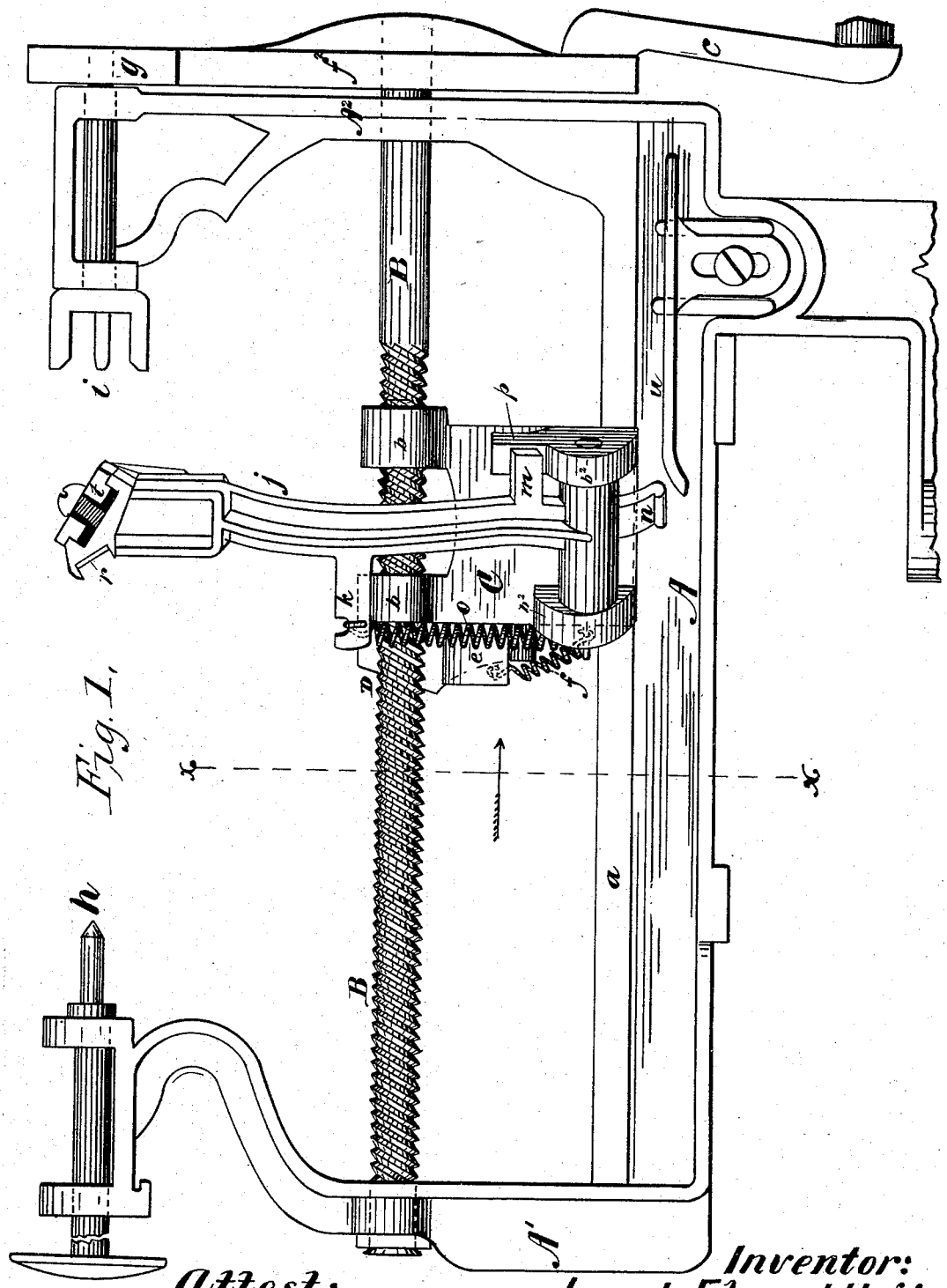
(No Model.) 2 Sheets—Sheet 1.

J. E. HOFF.

FRUIT PARER.

No. 262,896. Patented Aug. 15, 1882.



Attest:
Charles H. Pell
Frederick F. Campbell

Inventor:
Joseph Elwood Hoff,
by O. Drake. Atty.

(No Model.) 2 Sheets—Sheet 2.

J. E. HOFF.

FRUIT PARER.

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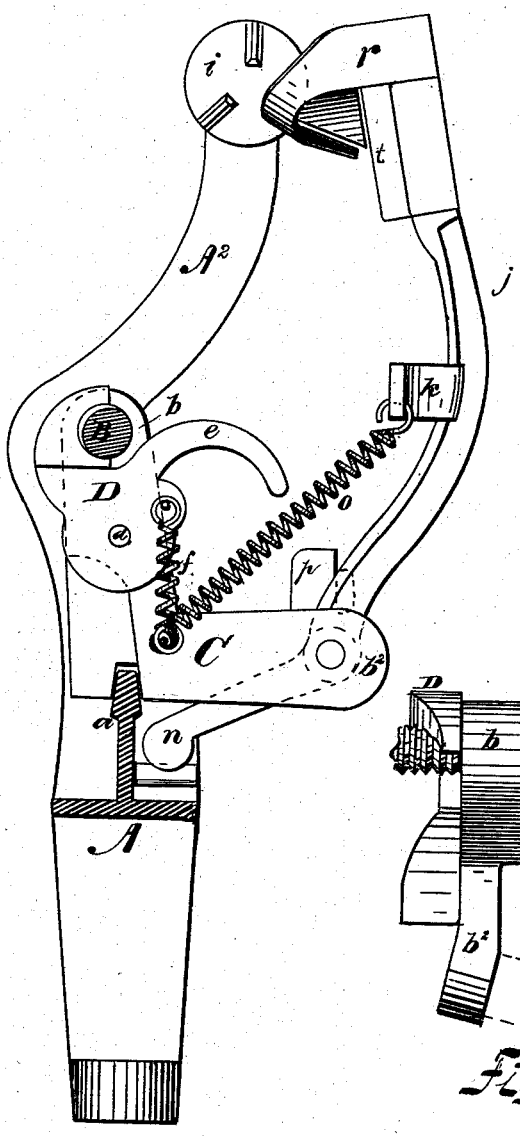
Fig. 2.



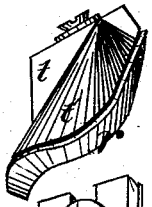


Fig. 3.

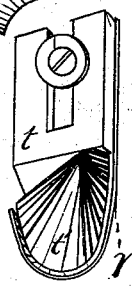


Fig 4.

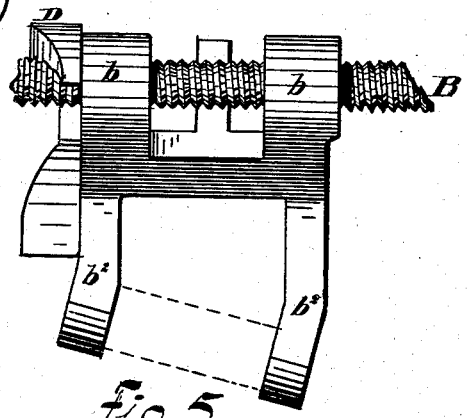


Fig. 5.

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Charles T. Winters.

Inventor:

Joseph Elwood Hoff

by O. Drake, Atty.

UNITED STATES PATENT OFFICE.

JOSEPH E. HOFF, OF NEWARK, NEW JERSEY, ASSIGNOR TO JOHN R. WEEKS, JR., OF SAME PLACE.

FRUIT-PARER.

SPECIFICATION forming part of Letters Patent No. 262,896, dated August 15, 1882.

Application filed April 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ELWOOD HOFF, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Parers; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to reduce the cost of construction and increase the effectiveness of parers; and it consists in the arrangement and combination of parts, substantially as will be hereinafter set forth, and finally embodied in the claims.

Referring to the accompanying drawings, included in two sheets, in which similar letters of reference indicate like parts in each of the several figures, Figure 1, Sheet 1, is a front elevation of my device, showing the relation of the several parts to one another. Fig. 2, Sheet 2, is a sectional view of the same, taken through line x in the direction indicated by the arrow; and Figs. 3, 4, and 5 are views illustrating more fully certain details of construction, all of which will be hereinafter fully described.

In said drawings, A represents the bed frame-work of my device, upon which is arranged means for securing the parer to the table, and having at each extremity thereof upwardly-extending arms A' A^2, which carry the spindles for carrying the potato or fruit while the same is being pared. Said bed forms a guide or track, a, with which a carriage, C, engages to steady the same.

B indicates a screw-shaft, having bearings in the upwardly-extending arms A' A^2, which shaft is adapted to revolve in said bearings actuated by the gear-wheel f^2 and crank c, secured upon one extremity thereof. Said screw-shaft carries the before-mentioned carriage C and causes the same to move laterally in a straight line. The journals or bearings b are preferably smooth-cored, and slide over the screw-shaft freely without being directly operated upon by the thread of the screw.

To supply motion to the carriage I secure thereto the half-nut D, which may be pivoted to the carriage at d and have a finger-piece, e. The said half-nut may also be connected to the carriage by a spring, f, so arranged as that the normal tendency of said half-nut will be to engage with the threaded shaft B, as shown in Figs. 1, 2, and 5. Said half-nut, where it engages with the shaft B, is provided with a female thread, so that when said shaft is revolved under the influence of the crank the said half-nut will cause the carriage to move laterally upon the shaft B and track a.

Upon the carriage C are arranged ears b^2, which form pivotal bearings for a knife-carrier, j. Said ears b^2 may be so arranged as that the pivotal or fulcral center of the carrier will not be parallel with the center of action of the fruit, but will be at an angle therewith, as shown in Figs. 1 and 5. By this arrangement the commencement of the cut is made easier than when the plane of action of the knife is tangential to the pivotal end of the fruit. On one or both of said ears b^2 is formed a stop-lug, p, which engages with a co-operating lug, m, upon the knife-carrier. The said lugs, coinciding, limit the action of said carrier, so that the knife-blade cannot pass the spindle-center when said spindles are not supplied with a potato or fruit.

Said knife-carrier may also be provided with means k for receiving the extremity of a spring, o, which spring is secured at its opposite extremity to the carriage. Said spring is adapted to hold the paring-blade into engagement with the potato, as will be apparent upon reference to Fig. 2.

Upon the upper extremity of the carrier j are secured a paring-blade, r, and gage t, provided with a guard, t', said gage and blade being adjusted together, and shown in front elevation and plan view in Figs. 3 and 4. The cutting-edge of said knife-blade r is made approximately spiral in form, so that in its engagement with the potato or fruit it will at every point thereof present an inclined edge thereto which will produce a shearing cut very effective in paring. The gage t is adapted to be adjusted in its relation to the blade-edge to vary the thickness of the paring, while the guard t', presenting inclined surfaces to the potato, enables the blade to glide into and over

the eyes and protuberances on the surface thereof.

In operating the device the hand-crank C causes the gear-wheel f^2 to operate the shaft B and pinion *g*, secured to the forked shaft *i*. Said pinion causes the potato or fruit placed on the fork *i* and spindle *h* to revolve, as will be clearly understood. The shaft B, having the half-nut in engagement therewith, causes the carriage to travel laterally thereon, which action causes the knife-blade to traverse from one pole to the other the revolving potato. When the said blade has arrived in its course to a point approaching the fork *i* the heel *n*, engaging with the plate *u*, (adjustable or otherwise,) prevents said blade from striking said fork and dulling the former. When the process of paring is completed the finger-piece *e* of the half-nut D is raised and the nut portion brought from engagement with the screw B, and the carriage thrown back preparatory to adjusting another potato and repeating the process.

Having thus described my invention, what I claim, and wish to secure by Letters Patent, is—

1. In a parer, a knife-blade the cutting-edge of which is spiral in form, substantially as and for the purpose set forth and shown,

2. In a parer, a knife-blade having one end secured to an adjustable gage and the other end free, the cutting-edge of said blade being spiral in form, substantially as herein set forth, for the purpose specified.

3. In combination in a paring device, the frame A A′ A^2, the screw-shaft B, pivotal half-nut D, carriage C, having the lug *p* thereon, the carrier *j*, fulcrumed upon said carriage, and having the co-operating lug *m* and means *k* thereon, the springs *o* and *f*, and the knife-blade *r*, all arranged and operating substantially as and for the purposes set forth and shown.

4. In a parer, the carriage C, working on a screw-shaft, B, the half-nut D, pivoted on said carriage, having the finger-piece *e*, and the spring connecting said half-nut and carriage, and having a normal tendency to hold said nut and shaft into operative engagement, substantially as and for the purposes herein set forth and shown.

5. In a parer, a cutter-carrier working in a plane inclined in its relation to the pivotal center of the potato, substantially as herein shown and described.

6. The combination, in a parer, of the carriage C, actuated by the screw-shaft B, said carriage bearing on the track *a* and having ears b^2 thereon, and the knife-carrier pivoted in said ears at an angle with said track and screw-shaft, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of March, 1882.

JOSEPH E. HOFF.

Witnesses:
CHAS. T. WINTERS,
CHARLES H. PELL.