

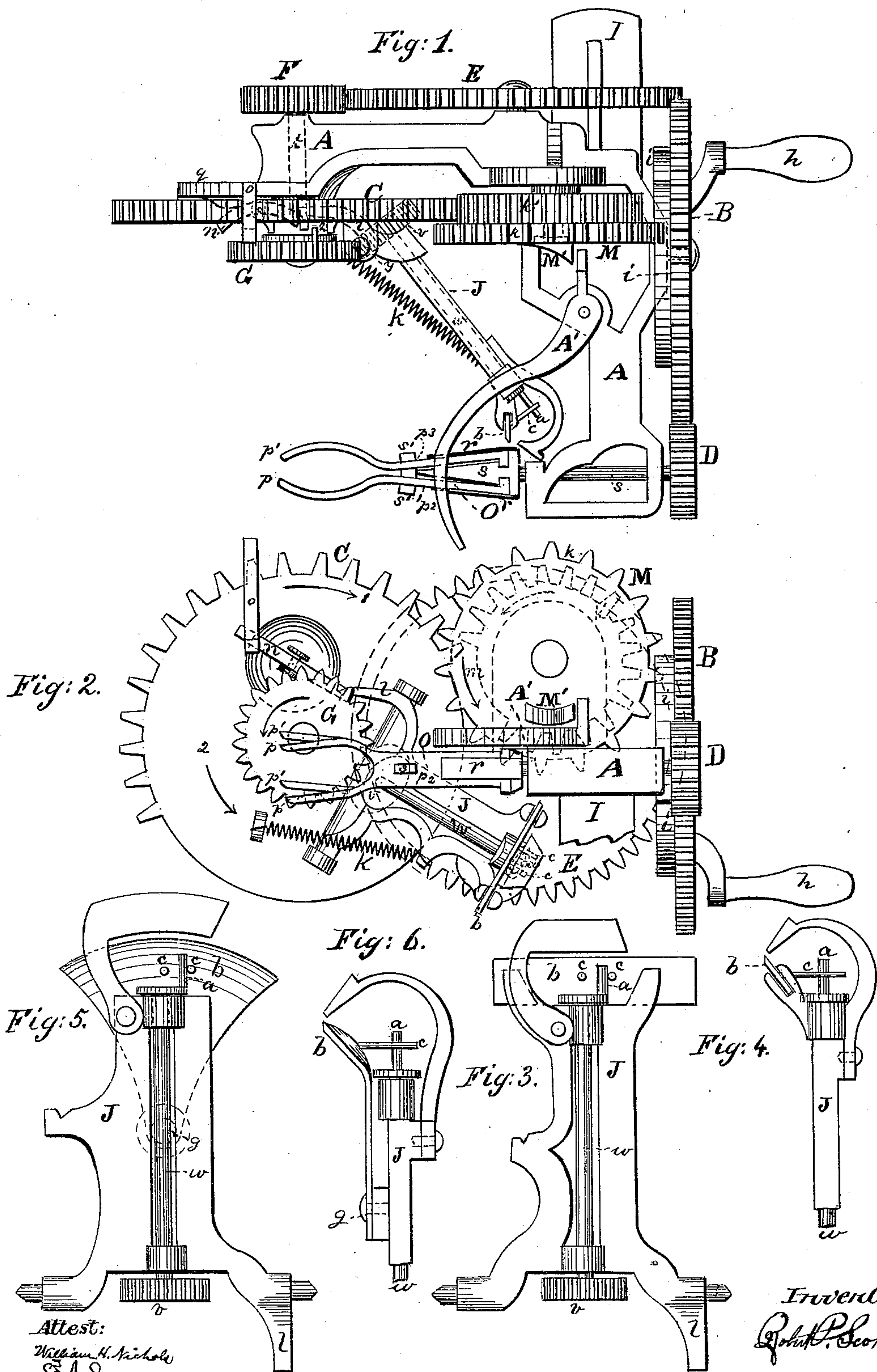
(Model.)

R. P. SCOTT.

APPLE PARER.

No. 256,059.

Patented Apr. 4, 1882.



UNITED STATES PATENT OFFICE.

ROBERT P. SCOTT, OF NEWARK, NEW JERSEY.

APPLE-PARER.

SPECIFICATION forming part of Letters Patent No. 256,059, dated April 4, 1882.

Application filed July 30, 1880. (Model.)

To all whom it may concern:

Be it known that I, ROBERT P. SCOTT, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful
5 Improvement in Paring Machines, of which the following is a specification.

The invention relates to that class of machines used for paring fruit or vegetables.

The object of my invention is to produce an
10 efficient parer in which the continuous rotary motion is substituted by other forms of the drawing or saw-cut knife and to generally improve the construction of parers of this class.

The invention consists of a new form of knife
15 and manner of operating the same and obtaining the draw-cut; also, in a manner of operating the "table-wheel," so called, causing it to reverse, returning to starting-point instead of making a full revolution.

Figure 1 is a plan of my improved parer. Fig. 2 is a front elevation of same. Fig. 3 is a detached front view of a reciprocating knife. Fig. 4 is a side view of Fig. 3. Fig. 5 is a detached front view of an oscillating or modified
25 form of a reciprocating knife. Fig. 6 is a side view of Fig. 5.

A, Figs. 1 and 2, is a supporting-frame. B is a driving-wheel, with handle *h*, and gearing into pinion D on the one side for transmitting
30 motion to fork *o*, and idle-wheel E on the other side, the latter gearing into pinion F, which is connected by shaft *t* with spur-wheel G. The swinging knife-arm J, pivoted at *y y*, supports shaft *w*, which is revolved by means of pinion
35 *v*, attached to one end and gearing into wheel G. A spring, K, is hooked to knife-arm J. All so far is identical with same parts designated by same letters in my patent of September 21, 1880.

Attached to the shaft *w* is a pin, *a*, on the
40 opposite end from the pinion *v*. This same end of shaft *w* in patent of September 21, 1880, carries a dished-shaped knife which revolves with the shaft *w*. In the present application the
45 pin *a* drives the reciprocating knife *b* in the following manner: The knife *b* is provided with two pins, *c c'*, Figs. 3 and 4, placed just wide enough apart to admit of the pin *a* passing between them. The knife *b* slides in grooves cut
50 in two projections or arms, *j j*, extending from

the body of the knife-arm J, the pin *a* being placed at a short distance from the center of the shaft *w*. It is easily seen that the revolving of the shaft *w* will cause the knife *b* to move back and forward, making the cut desired. 55

The following is one modification of the reciprocating knife *b*. A knife, *b*, is pivoted at the point *g*, Figs. 5 and 6, to the knife-arm J. In operating this knife the shaft has a pin, *a*, working between pins *c c'*, similar to the knife
60 *b*, the only difference being that the knife *b* oscillates back and forward, instead of the straight sliding motion.

It is evident that other means could be easily devised to transmit these movements to the
65 knives *b* than those given above, as it is a common feature in mechanics to cause a reciprocating motion to be transmitted from a rotary. The result obtained is what we claim as new—viz., a reciprocating knife in a fruit-paring machine. 70

The driver B, Figs. 1 and 2, is provided with a worm, *i i'*, on its inner face, which works in cogs on and transmits motion to wheel M, which latter is provided with two series of
75 cogs, *k k'*. The series *k'* are those which come in operation with the worm *i i'*, and are the means for propelling wheel M. The other series has an open space, *m*, and cogs which gear into table-wheel C. The object of this arrangement is that when the open space *m* presents itself to the wheel C the motion of the latter can be reversed and brought back to the starting-point, instead of making a full revolution, as is common with parers of recent date. 85

The means of reversing is as follows: The foot *l*, which is a part of the knife-arm J, strikes the projection or cam *q* in frame A, (see Figs. 1 and 2,) just as in patent of September 21, 1880, wherein the wheel C makes a full revolution. 90 The foot *l* is moved so that when it strikes the cam *q* and the knife-arm J is thrown back, Figs. 1 and 2, the end is raised above the surface of the wheel C and comes in contact with the lever *n*, which is hinged to table-wheel C. 95 When the foot *l* is raised to a certain height the end of lever *n* drops over and against the end of the foot *l*. This holds the knife-arm J fast in its thrown-back position while the table-wheel C is returning. While in such position 100

the end of foot *l* approaches so near to the spur-wheel *G* that it is struck by a long cog or projection, *z*, on the under surface of the wheel *G*, which revolves continually in the opposite
5 direction from the forward motion of the table-wheel *C*.

In Fig. 2 the arrow on wheel *G* shows its direction of revolution. The arrow nearest the periphery on table-wheel *C* shows its forward
10 motion, or that in which it turns while paring. The other arrow, 2, shows the reverse motion in coming back. When the cog *z* strikes the foot *l* the open space in wheel *M* presents itself so as to clear the cogs of table-wheel *C*.
15 When the table-wheel *C* is in position to commence its forward movement again the lever *n* has been caused to release the foot *l* by striking an incline under an arm, *o*, which passes from the frame *A* over the outer edge of wheel
20 *C*, which pushes down the one end of lever *n* and causes the other to rise, and the arm *J* drops forward. The reversing of the table is not new excepting as in operation with the wheel *M* and lever *n*. The reverse or back-and-
25 forward motion of the table-wheel *C* must not be confounded with the same so-called motion of the knife itself.

It will be noticed that any movement of the table-wheel *C* carries the knife-arm and knife therewith; but this motion is independent of
30 the reciprocating motion of the knife, which latter forms the principal part of this invention.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, 35 is—

1. In a paring-machine, and in combination with the mechanism thereof, a paring-knife having a backward-and-forward movement, substantially as and for the purpose set forth. 40

2. The table-wheel *C*, in combination with the worm-wheels *M*, spur-wheels *k* *k'*, spur-wheel *G*, with tooth *z*, knife-arm *J*, with foot *l*, arm *o*, lever *n*, and cam *q*, substantially as
45 and for the purpose set forth.

3. In a paring-machine, the combination, with the paring-knife, of mechanism, substantially such as described, for oscillating said knife, as set forth.

ROBERT P. SCOTT.

Witnesses:

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LOUIS A. SAYRE.