

(No Model.)

2 Sheets—Sheet 1.

F. SCHULTE.
POTATO PEELER.

No. 267,021.

Patented Nov. 7, 1882.

Fig: 1

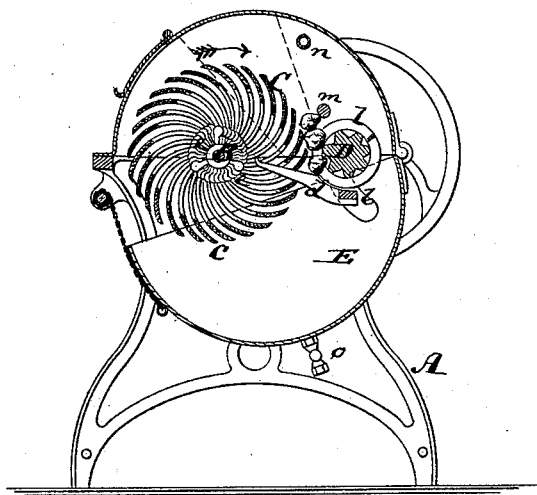
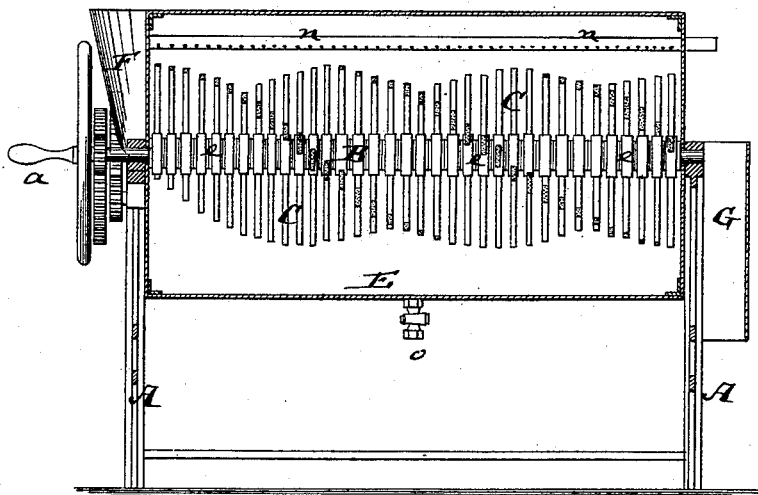


Fig: 2



Witnesses:
John C. Tunbridge.
John W. Spur

Inventor:
Friedrich Schulte
by his attorneys
Briesen & Böttger

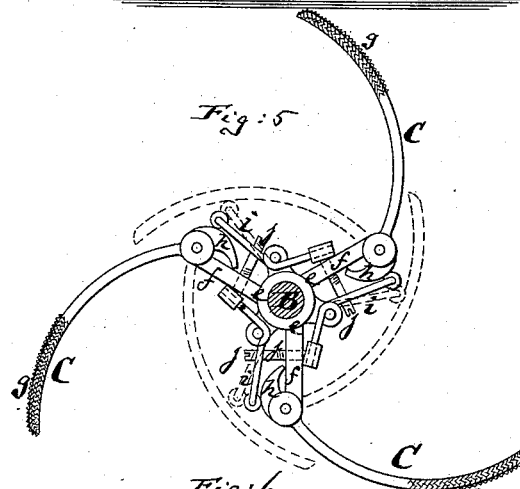
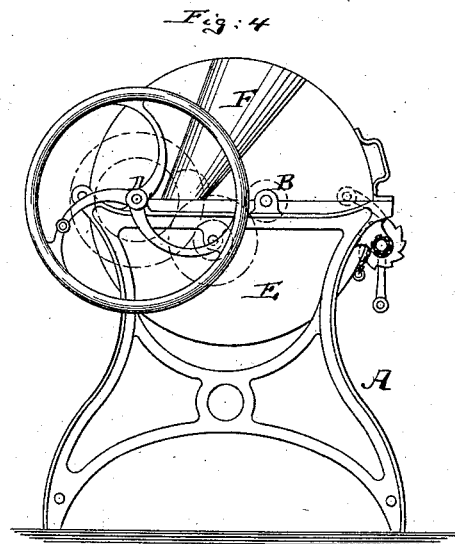
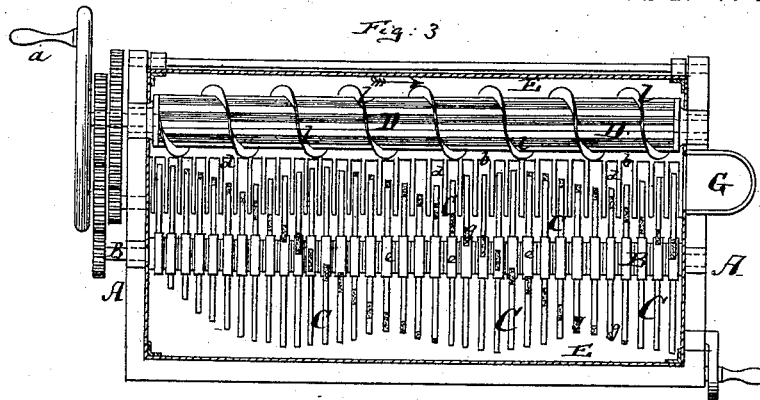
(No Model.)

2 Sheets—Sheet 2.

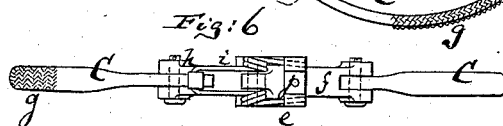
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UNITED STATES PATENT OFFICE.

FRIEDRICH SCHULTE, OF KALK, NEAR COLOGNE, PRUSSIA, GERMANY,
ASSIGNOR TO HIMSELF AND HEINRICH BAASER, OF SAME PLACE.

POTATO-PEELER.

SPECIFICATION forming part of Letters Patent No. 267,021, dated November 7, 1882.

Application filed May 17, 1882. (No model.) Patented in Germany September 22, 1880, No. 13,889.

To all whom it may concern:

Be it known that I, FRIEDRICH SCHULTE, of Kalk, near Cologne, Prussia, in the Empire of Germany, have invented an Improved Machine for Peeling Potatoes, of which the following is a specification.

Figure 1 is a vertical cross-section, and Fig. 2 a vertical longitudinal section, of my improved machine for peeling potatoes. Fig. 3 is a horizontal section of the same; Fig. 4, an end view thereof; Fig. 5, a detail side view; and Fig. 6, a detail top view, on an enlarged scale, of the peeling mechanism.

This invention relates to new mechanism for peeling potatoes; and it consists, first and principally, in the use of rotary spring-arms that have roughened faces adapted to rasp off part of the peel of the potato, and also in the combination of these arms with mechanism for supporting and for feeding the potatoes through the machine.

In the drawings, the letter A represents the frame of my improved machine, in which frame is hung the shaft B, which carries the peeling-arms C, and to which rotary motion can be imparted by suitable gearing from a hand-crank, *a*, or from other suitable hand or other power. In the framing A is also hung the shaft of a roller, D, parallel with the shaft B. Below the roller D is fastened a bar, *b*, carrying teeth *d*, that extend toward the shaft B, as shown in Figs. 1 and 3. The peelers C on the shaft B are shown enlarged in Figs. 5 and 6. The said shaft B carries suitably-spaced brackets *e*, each having three (more or less) radially-projecting arms, *f*. In the ends of these arms *f* are pivoted the curved peeler-arms C. The convex sides of these peeler-arms are roughened, file-fashion, as at *g*. Each peeler-arm C has at its inner end a projecting lug, *h*, which prevents said peeler-arms being swung outward farther than shown by full lines in Fig. 5, the lug coming in contact in that position with the arm *f* of the bracket; but the said lug does not prevent the peeler-arm being folded toward the shaft B, as indicated by dotted lines in Fig. 5. A stout spring, *i*, held to the bracket *e*, bears on the lug *h*, and has a tendency to hold the arm C in the position shown by full lines in Fig. 5; but the spring

will yield if pressure is brought against the convex side of the arm C. The tension of the spring *i* can be regulated by a suitable screw, *j*, which has its bearings in one of the arms *f*. It will be seen that for each set of three (more or less) arms, C, there is an equal number of springs, *i*, and their appurtenances. The shaft B has its several brackets *e* properly spaced, and each of these brackets carries its series of arms C, and these arms are so spaced on the shaft that when the shaft B is revolved they can pass through the spaces formed between the teeth *d* of the rake *b d*. The roller D is ribbed and carries a spiral blade, *l*, as shown. It is also revolved by suitable connection with the driving mechanism. Above the roller D is a bar, *m*, to prevent the potatoes being thrown up by the revolution of said roller. The parts B and D, with their appurtenances, are confined in a drum, E, of which the lower part is hinged, so that it can be let down to discharge its contents. Within the upper part of the drum E is a sprinkler, *n*, which is connected with a water-supply pipe or vessel to throw a spray of water over the potatoes being peeled. The potatoes are supplied to one end of the machine through a hopper, F, and discharged at the other end of the machine through a conduit, G.

The operation of the machine is as follows: The potatoes to be peeled are fed by the hopper F upon one end of the rake *b d*. The shaft B is then revolved in the direction of the arrow shown in Fig. 1, so as to bring its rasping or roughened spring-arms C in contact with the potatoes, which they press against the ribbed roller D, said roller being roughened or ribbed to give a good holding-surface to the potatoes. Gradually, however, by the rotation of the roller D, its spiral blade *l* moves the potatoes on the rake-teeth *d* in the direction shown by the arrow in Fig. 3—that is to say, toward the discharge-conduit G. By contact with the roller D the potatoes are revolved, and by the blade *l* they are moved longitudinally, and are thus gradually fed through the machine, exposing, while in motion, their several faces to the action of the roughened spring-arms until their peel has been taken entirely

off by said spring-arms. The water necessary to the operation is supplied by the sprinkler *n*, and the peels that are taken off the potatoes are, by the arms *C*, carried into the lower part of the drum *E*, which in operation will be nearly full of water from the sprinkler *n*. The surplus water can from time to time or continuously be let off through a faucet, *o*.

The spiral blade *l*, instead of being rigidly fixed upon the drum *D*, may be made to simply surround the same and have its own independent rotation imparted to it, in which case it will connect with loose flange-like rings that embrace the shaft of the roller *D*, near the ends thereof.

I have described this machine as intended to peel potatoes; but of course it may be used to peel other vegetables or fruits, and I do not limit myself to the use of the machine for application on any particular substance.

It is quite evident that, according to the size of each potato, the position of each arm *C* that comes in contact with it will be varied while so in contact.

I claim—

1. The rotating spring-arms *C*, combined with

a support for the potatoes to be peeled, and with a rest against which they are pressed, and with mechanism for feeding the potatoes, substantially as described.

2. The combination of the shaft *B* with the bracket *e*, having arms *f*, and with the pivoted arms *C*, that are roughened at *g*, lugs *h*, and spring *i*, substantially as specified.

3. The combination of the shaft *B*, having the roughened spring-arms *C*, with the supporting-teeth *d*, roller *D*, and feeding-blade *l*, substantially as specified.

4. The combination of the shaft *B*, having roughened spring-arms *C*, with the roller *D* and rod *m*, and with devices for supporting and longitudinally moving the potatoes, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRIEDRICH SCHULTE.

Witnesses:

CARL KURZ,
FERDINAND BURCHARTZ.