

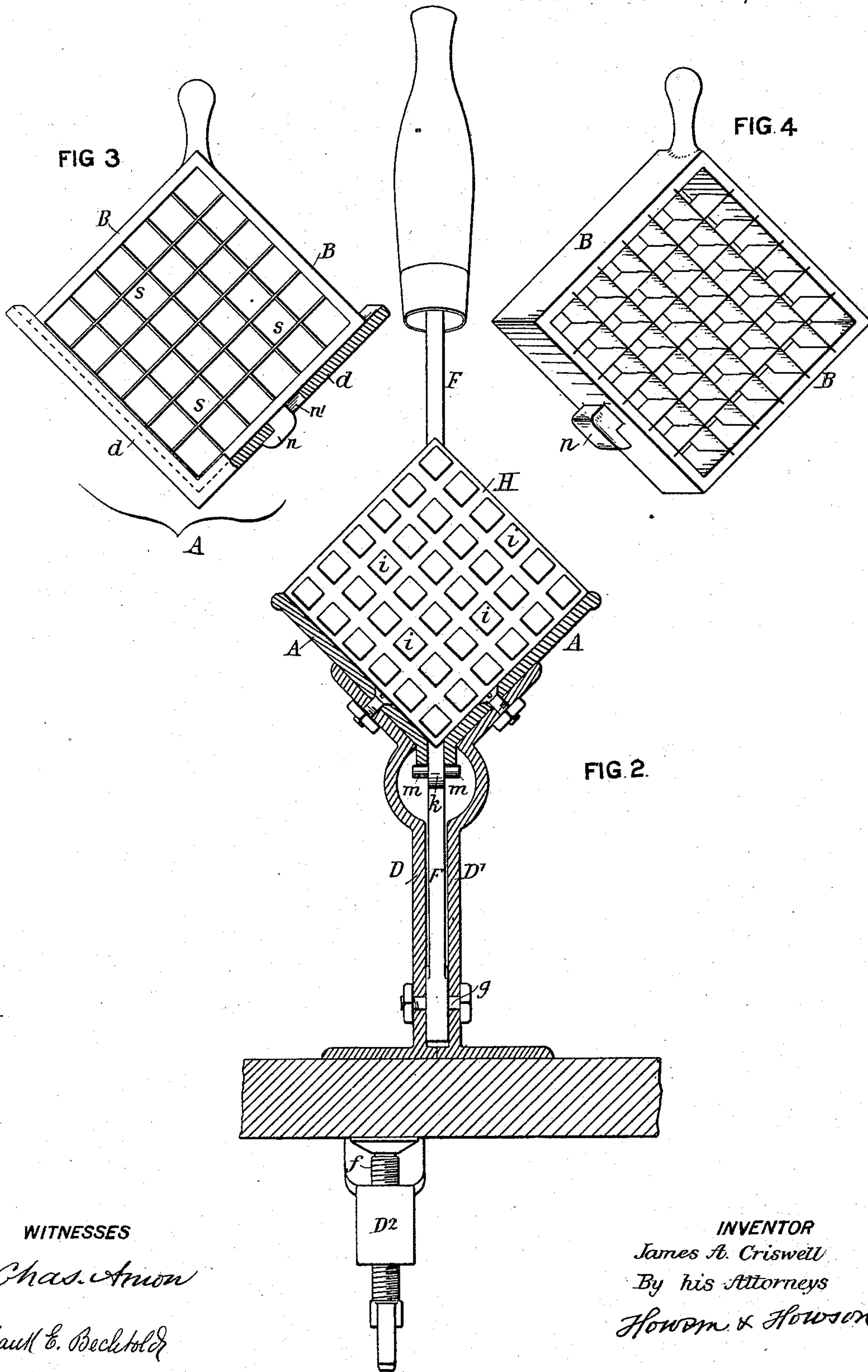
(No Model.)

2 Sheets—Sheet 2.

J. A. CRISWELL.
POTATO CUTTER.

No. 533,164.

Patented Jan. 29, 1895.



UNITED STATES PATENT OFFICE.

JAMES A. CRISWELL, OF PHILADELPHIA, PENNSYLVANIA.

POTATO-CUTTER.

SPECIFICATION forming part of Letters Patent No. 533,164, dated January 29, 1895.

Application filed April 24, 1894. Serial No. 508,774. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. CRISWELL, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain

Improvements in Potato-Cutters, of which the following is a specification.

The object of my invention is to provide a cheap and efficient machine for cutting potatoes into strips for culinary purposes, or to serve as seed for planting, and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1, is a longitudinal section of a potato cutting machine constructed in accordance with my invention. Fig. 2, is a transverse section on the line 2—2. Fig. 3, is an end view partly in section, and Fig. 4, is a perspective view of the cutter.

A is a V-shaped trough having at the bottom a longitudinal slot *a*, the rear end of this trough being closed by a plate *b* and the front end of the trough having a pocket *d* for the reception of the cutter which is of rectangular form and is constructed in the manner hereinafter described.

The V-shaped trough A is mounted upon a two-part standard D D', one-half of this standard being secured to one side of the V-shaped trough and the other half of the standard being secured to the opposite side of said trough, the portion D of the standard having a downwardly projecting clamping arm D² provided with a clamp screw *f* so that the device can be readily applied to and secured upon the projecting portion of a table or bench.

The two halves D D' of the supporting standard are separated sufficiently to permit of the free play between them of a lever F which is hung to the lower portion of the standard by a transverse bolt *g* and passes through a slot in a bar G, said lever being provided with a slot *g'* for the reception of an antifriction roller mounted upon a pin *h* which extends across the slotted portion of the bar G. The front end of said bar carries a head G' for the reception of the plunger H which is cross grooved so as to form a series of projecting rectangular fingers *i* of such shape and size as to enter freely the rectangular openings formed by the crossing knives of the cutter.

The head G' has a finger *k* projecting through the slot *a* at the bottom of the V-shaped trough, this finger having, below the slot, a transverse opening for the reception of a pin *m* whereby the plunger is properly retained in the trough A, and the rear end of the bar G is bent downward so as to pass through the slot *a* and has beneath said slot an opening for the reception of a corresponding pin *m'* whereby tipping of the plunger in the trough is prevented.

When the plunger is retracted, a potato is laid in the trough in advance of said plunger, as shown by dotted lines in Fig. 1, and when the lever F is moved forward so as to project the plunger the potato is forced against the knives of the cutter and is cut thereby into a number of strips, the fingers *i* of the plunger entering the spaces between the knives when said plunger reaches the limit of its forward movement so as to effect the complete discharge of all of the cut strips which fall into a receptacle suitably located at the end of the machine.

In order to prevent displacement of the cutter which might otherwise be caused by upward pressure of the potato thereupon the frame of said cutter has at one side a hook *n* which, in adjusting the cutter to position in the pocket *d* of the trough, is passed through an opening *n'* in one side of said pocket, the cutter being then moved downward along said side of the pocket so as to cause the hook to engage with a portion of the pocket below the opening *n'*, as shown in Fig. 3.

The knives *s* of the cutter are fitted together in the manner shown in Fig. 4, one-half of the knives being slotted at the back and the other half of the knives being slotted at the front so as to permit of the interlocking of the knives and the outer ends of each knife blade *s* are embedded in the frame B of the cutter, the interlocked set of knives being suitably disposed in the mold and the frame B cast around the ends of the knife blades so as to provide a cheap and effective method of holding the knives in their proper position in respect to each other.

I do not claim the combination in a potato cutter of a rectangular cutter having sets of cross knives, a sliding plunger having projections for entering the spaces between the knives, and a pivoted lever for moving said

plunger, as such a combination of parts has long been known, my invention being directed mainly to specific features of detail in a machine of this character. Hence

5 I claim as my invention and desire to secure by Letters Patent—

1. The combination of the cutter, with a V-shaped trough having a longitudinal slot at the bottom, and having at the front end a
10 pocket for the reception of said cutter, a plunger guided in said trough and having a bar with portions projecting through the slot of the trough and provided with retainers beneath said slot, and a pivoted lever engaging
15 with said bar and serving to operate the plunger, substantially as specified.

2. The combination of the cutter, the plunger and the plunger operating lever, with a V-shaped trough and a supporting standard
20 therefor made in two parts, one secured to one side of the trough, and the other to the opposite side of the same, said two-part standard

providing a means of pivoting the lever, and the two parts of the standard being so separated as to permit of the free play of the lever between them, substantially as specified. 25

3. The combination of the guided plunger and its operating lever, the cutter frame having at one side a projecting hook and the V-shaped trough having at the forward end a
30 pocket for the reception of said cutter frame, one side of said pocket having an opening for the passage of the hook of the cutter frame, said opening being so located that when the cutter frame is adjusted to its final position
35 the hook will engage with the side of the pocket, substantially as specified.

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

JAMES A. CRISWELL.

Witnesses:

FRANK BECHTOLD,
WILLIAM M. STEWART, Jr.