

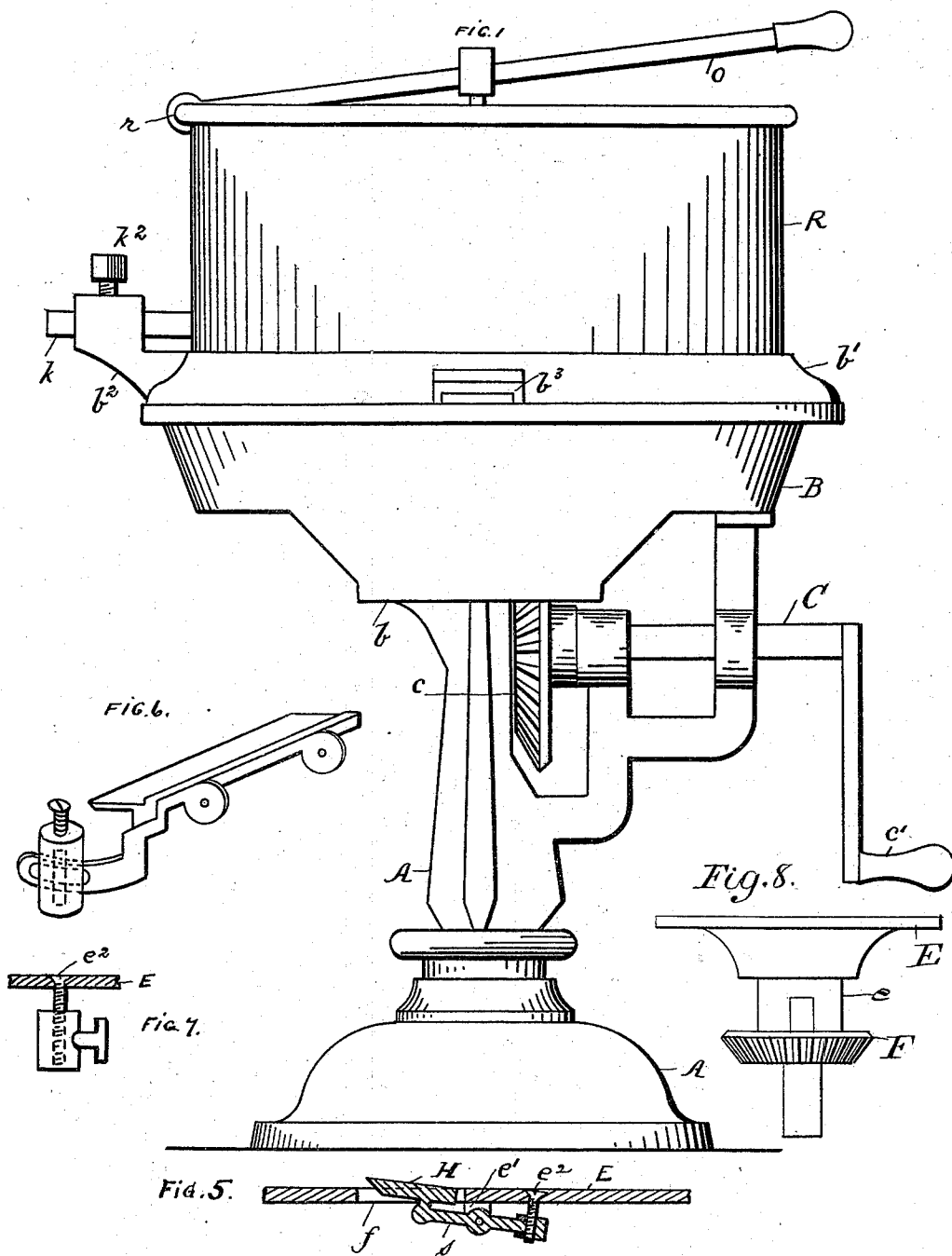
(No Model.)

2 Sheets—Sheet 1.

W. H. BURGIN.
VEGETABLE CUTTING MACHINE.

No. 552,512.

Patented Jan. 7, 1896.



WITNESSES :

John Bruce
J. S. Randall

INVENTOR

William H Burgin
by Lewis F Bruce
Atty

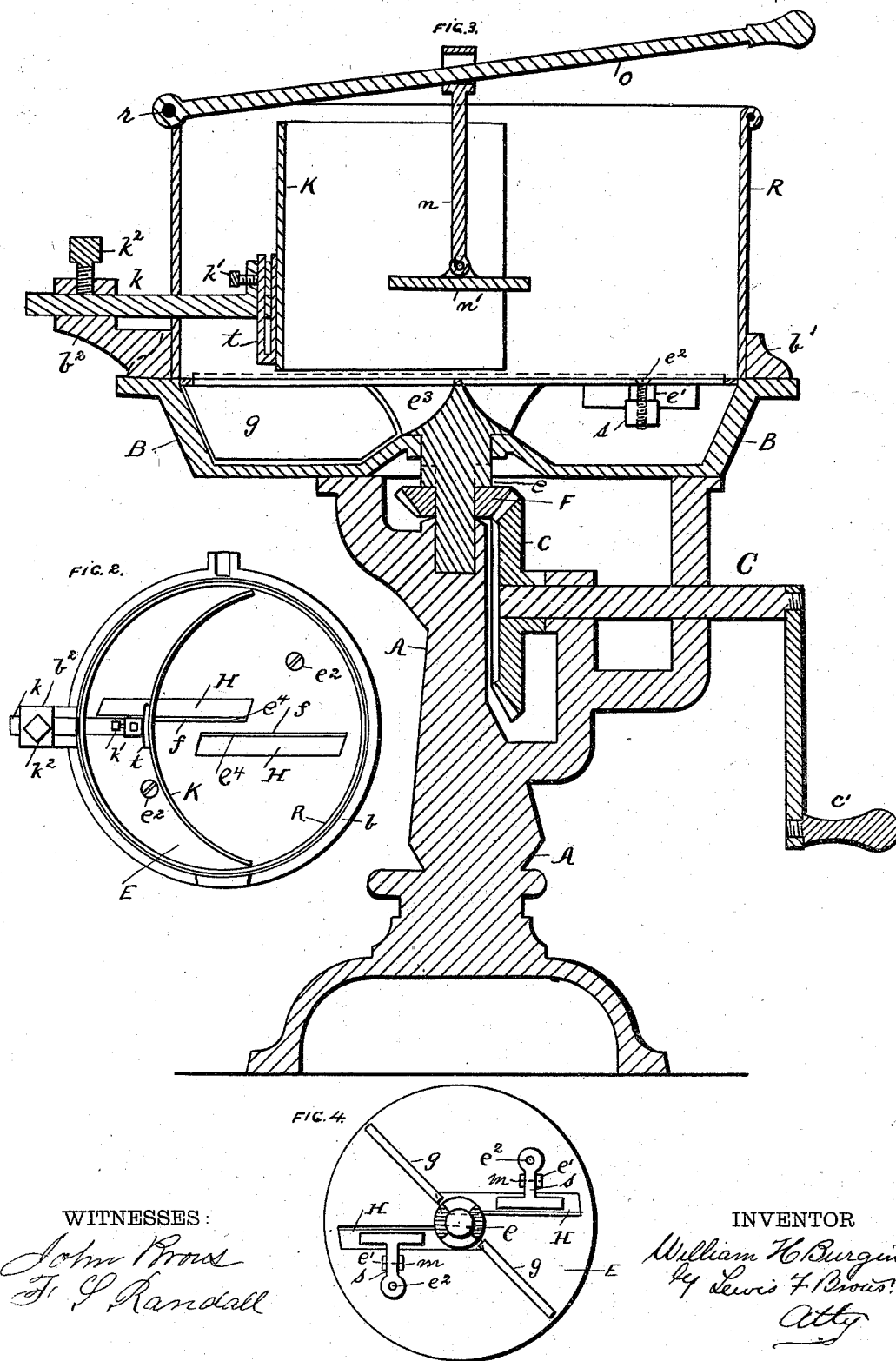
(No Model.)

2 Sheets—Sheet 2.

W. H. BURGIN.
VEGETABLE CUTTING MACHINE.

No. 552,512.

Patented Jan. 7, 1896.



WITNESSES:

John Brown
F. J. Randall

INVENTOR

William H. Burgin
by Lewis F. Brown
Atty

UNITED STATES PATENT OFFICE.

WILLIAM H. BURGIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO JOHN L. METZGER, OF SAME PLACE.

VEGETABLE-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 552,512, dated January 7, 1896.

Application filed November 19, 1894. Serial No. 529,318. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. BURGIN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Vegetable-Cutting Machines; and I do 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 the letters of reference marked thereon, which form a part of this specification.

This invention relates to machines for slicing or cutting vegetables, and is of the class in which a revolving plate is provided with knives that cut from the under side of the stock; and the invention consists in such construction and arrangement of the knives that the cuttings can be of any desired thickness, and no part of the stock resting on the revolving plate can escape the cutting-edges of the knives.

It further consists in an arrangement of wings projecting from the bottom face of the revolving plate for removing the cuttings.

A special construction of drive mechanism is used; also means for holding the stock to be cut firmly within the hopper and forcing it down upon the knives.

I have illustrated the invention by the drawings herewith, in which—

Figure 1 is a side elevation of the machine. Fig. 2 is a top view thereof. Fig. 3 is a transverse vertical section. Fig. 4 is a bottom view of the revolving cutter-plate. Fig. 5 is a cross-section of one of the knives, showing the manner of its adjustment. Figs. 6 and 7 are perspective and side views respectively of a modified form of knife adjustment. Fig. 8 is a detached view of a part of the cutter or knife plate and its clutch-stem and the clutch bevel-gear.

Similar letters point out like parts.

A represents a stand upon which all of the parts of the machine are supported and operated. Forming a part of the stand A is a circular chamber B provided with a discharge-flue *b*, and radially under the said chamber is mounted in a projecting frame-work of the

stand a drive-shaft C, the inner end of which is provided with the bevel-gear *c*, and secured to the outer end of said shaft is a power-winch *c'*.

Receiving a bearing in the stand A, by means of the clutch-stem *e*, is a revolving plate E of a diameter equal to the inner measurement of the chamber B, and said plate is provided with two adjustable knives H, that are secured in openings *f*, parallel to the radial line of the revolving plate E, and the said knives each extend a little beyond the dead-center of the revolving plate.

To the underside of the revolving plate, and secured to or forming a part of the same, are downwardly-projecting wings *g*. Meshing with the power bevel-gear *c* upon the end of the drive-shaft, its hub resting on the stand A, is a bevel-gear F, the hub of which is constructed in clutch form for engagement with the stem of the revolving plate similarly constructed to mesh with the former, the bearing part of said stem in the stand A also forming an axle for the bevel-gear F.

Within the hopper is a flexible sheet-metal partition K of somewhat similar contour and secured upon the inner end of the laterally and vertically adjustable bar *k*. Pivoted on the rim *r* of the hopper is a hand-lever *o*, provided with a yoking depending rod *m*, having attached to it a pivoted foot *n'*.

In order that the flexible partition K may not be struck in the sweep of the knives when adjusted to cut thick or thin slices of stock, the supporting-bar *k* attached to it is adjusted vertically by means of the set-screw *k'* on the bar *k* and the bracket *t* secured to the rear face of the flexible partition, the lateral adjustment of the partition being effected by means of the set-screw *k²* in the guide-bracket *b²*, forming a part of the retaining-rim *b'*.

To the bottom face of each of the knives H is secured a lever *s*, pivoted at *m*, and projections *e'*, from the bottom of the plate E, and the inner ends of each of these levers is provided with an adjustable screw *e²*, which passes through and comes flush with the upper face of said plate.

In the construction shown, by which the bevel-clutch gear engages the clutch-stem of the circular cutter-plate and is made to re-

volve the latter by reason of the construction shown, keys or any other means of fastening the detachable bevel-gear are dispensed with, and at the same time secures all the advantages of a firmly-fastened bevel-gear to the integral stem of the cutter-plate, and this particular form of drive presents the advantages of cheap construction and the quickest and most practical means of engaging and disengaging the circular plate when it is desirable to assemble the machine or remove the cutter-plate.

The knives described each, by passing beyond the center of the circular plate, cut from the whole bottom surface of the stock, not leaving any dead points, and the knives being adjustable the fineness of the cut can be evenly regulated, and the position of the cutting-edges of the knives when the plate is rotated does not have any tendency to lift the stock in the hopper, but entirely the reverse result is to be found. Each knife in its rotation inclines to draw the article to be cut downward, so as to have it receive the full shearing action of the knife following.

All of the construction is simple, inexpensive, and durable.

I claim—

1. In a vegetable cutting machine the combination, of a supporting stand provided with a hopper and drive-shaft, of a circular rotating plate provided with knives in a radial plane, the cutting edges of said knives adjustable to the face of said plate in slots therein, and said plate provided with scraping wings and an integral clutch stem with a clutch-bevel-gear for engaging said stem, as set forth.

2. In a vegetable cutting machine the combination of a supporting stand provided with a hopper, and a rotating plate provided with knives, of a vertically and laterally adjustable flexible partition, pivoted bracket feed-arm, and pivoted foot, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. BURGIN.

Witnesses:

LEWIS F. BROCES,
CHARLES G. CORSON.