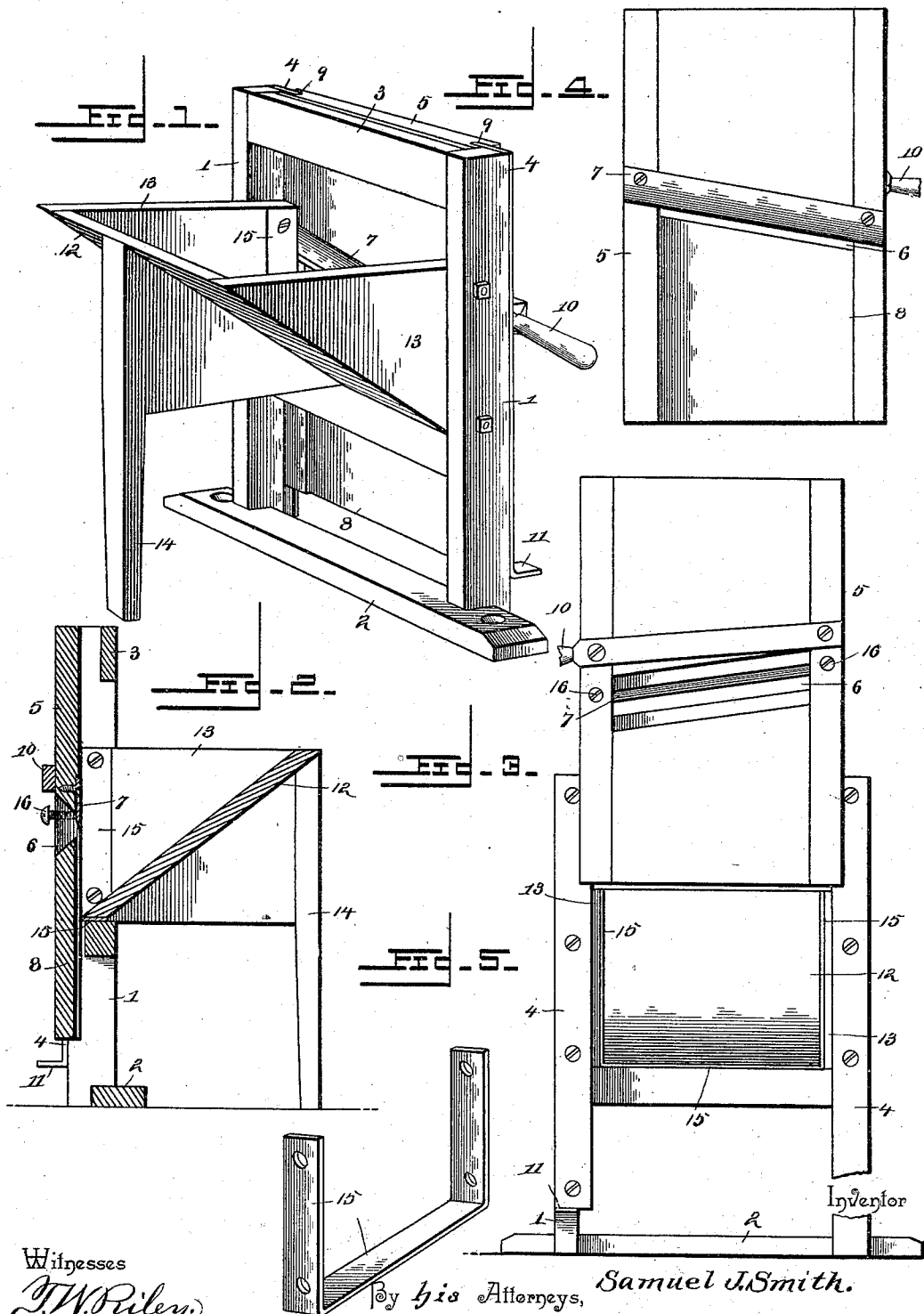


(No Model.)

S. J. SMITH.
VEGETABLE CUTTING MACHINE.

No. 545,983.

Patented Sept. 10, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL JEWETT SMITH, OF FRANKLIN, PENNSYLVANIA.

VEGETABLE-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 545,983, dated September 10, 1895.

Application filed March 30, 1895. Serial No. 543,922. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL JEWETT SMITH, a citizen of the United States, residing at Franklin Borough, at the Post-Office of Conemaugh, in the county of Cambria and State of Pennsylvania, have invented a new and useful Vegetable-Cutting Machine, of which the following is a specification.

This invention relates to an improvement in vegetable-cutters, and has for its object to simplify and improve the construction of articles of the character referred to, with a view to providing a novel form of combined ledger-blade, knife-guide, and supporting-yoke for bracing and upholding the inclined floor of the hopper or feed-chute.

A further object of the invention is to provide the frame of the cutter with vertically-disposed sheet-metal guides, and to groove the side edges of the knife carrier or frame to engage said guides without detracting from the strength of or weakening said knife-carrier or frame, and also to construct one of said guides in a manner that will adapt it to serve as a stop which operates, in connection with the actuating-handle of the knife-carrier, to limit the downward movement of said carrier.

In order to accomplish the above objects, the invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the improved vegetable-cutter, looking toward the rear. Fig. 2 is a vertical transverse section through the same. Fig. 3 is a front elevation of the machine with the knife carrier or frame raised sufficiently to show the location of the combined stationary ledger-blade, knife-guide, and supporting-yoke. Fig. 4 is an inside elevation of the knife carrier or frame. Fig. 5 is a detail perspective view of the combined stationary ledger-blade, knife-guide, and supporting-yoke.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the drawings, 1 designates a pair of posts or uprights spaced any suitable distance apart and connected at their lower ends by a cross-bar or horizontal base-timber

2 and at their upper ends by a horizontal timber 3, thus forming an upright rectangular frame. To the front faces of the uprights 1 are secured a pair of sheet-metal strips 4, the inner adjacent edges of which are projected within the plane of the inner adjacent faces of the uprights or standards 1, in such manner as to form oppositely-disposed vertical guides for the knife-carrier.

The knife-carrier, indicated at 5, is preferably made in the form of a rectangular board or sash having adjacent to its center an oblique slotted opening 6. Secured to the inner face of this carrier or frame, and projecting slightly over said oblique opening from above, is an oblique cutting-blade 7, having a pendant cutting-edge, and beneath such knife the inner face of the carrier or frame is recessed or cut away, as indicated at 8, for the purpose of allowing the material to be cut to be passed beneath the blade or in the path in which said blade travels. The knife carrier or frame 5 is formed in its opposite side edges with narrow grooves 9, corresponding to the thickness of the metal guides 4 and co-operating therewith to guide said knife-carrier in its reciprocating movements. The knife-carrier is further provided with a handle 10, which projects laterally beyond one side thereof. The guiding-strip 4 upon that side of the knife-carrier from which the handle 10 projects is deflected outwardly at its lower extremity in such manner as to form a stop 11, which serves to limit the downward movement of the knife-carrier by reason of the handle 10 striking against said stop.

The hopper or inclined feed-chute comprises a canted or inclined bottom 12 and triangular side boards or guards 13, which are preferably secured at their front edges to the inner adjacent faces of the uprights 1, as shown. This hopper or feed-chute extends rearwardly from the upright frame in which the knife-carrier slides, and is braced and supported by means of a centrally-disposed leg or prop 14.

15 designates a U-shaped or three-sided yoke, which is preferably made from a single strip of steel, the central portion of which passes beneath the forward lower edge of the inclined chute-bottom and constitutes the stationary ledger-blade, against which the ob-

lique cutter or knife on the carrier 5 operates. The terminal portions of this yoke are extended vertically and secured to the inner adjacent faces of the triangular side boards 5 or guards of the hopper or chute in such manner that their forward edges will project slightly beyond the forward edges of said triangular side boards or guards, in position to form bearing-edges against which the reciprocating knife may rest and move. This metal yoke therefore operates as a support for the lower end of the inclined bottom of the hopper or chute, and serves to guide and steady the movements of the reciprocating knife, and also constitutes the stationary ledger-blade of the machine. The oblique cutter, or knife 7 is capable of being adjusted toward and away from the stationary ledger-blade by means of set-screws 16, which pass through the knife-carrier 5 and bear against said oblique knife adjacent to its lower edge, as shown.

By means of the construction above described, a very simple and efficient vegetable-cutter is produced, in which a yoke made from a single strip of steel performs the three-fold function of supporting the inclined bottom of the hopper or feed-chute, guiding and steadying the reciprocating knife, and forming the stationary ledger-blade of the machine. The construction described also provides a convenient stop for limiting the downward movement of the knife-carrier.

It will be apparent that changes in the form, proportion, and minor details of construction

may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a vegetable cutter, the combination with an upright frame, and a reciprocating knife carrier traveling therein, of a hopper or chute projecting laterally from said frame, and a yoke comprising a strip of metal having its central portion disposed beneath the bottom of the hopper or chute and its terminal portions secured to the inner adjacent faces of the side boards of said hopper or chute, said yoke serving to support the bottom of the hopper or chute and constituting vertical guides for the reciprocating knife and also a stationary ledger blade, substantially as and for the purpose specified.

2. In a vegetable cutter, the combination with the frame in which the knife carrier slides, of the oppositely disposed metal guiding strips secured to said frame and engaging grooves in said knife carrier, one of said guiding strips being deflected at its lower end to engage with the laterally projecting handle of the knife carrier so as to form a stop for limiting the downward movement of said carrier, substantially as set forth.

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