(No Model.)

ANTHONY ISKE & ALBERT ISKE.

SLICING MACHINE.

No. 519,959. Patented May 15, 1894.

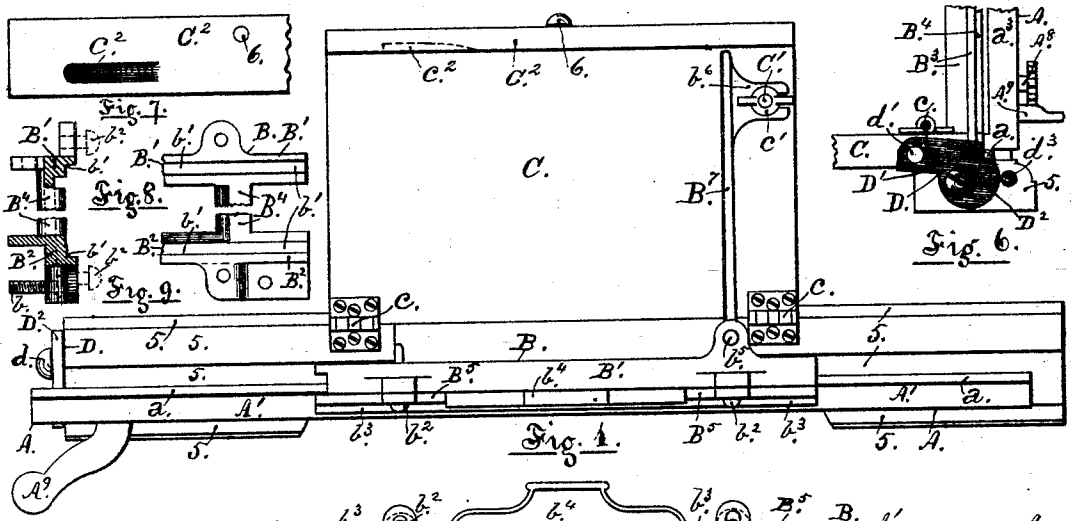

Fig. 1.

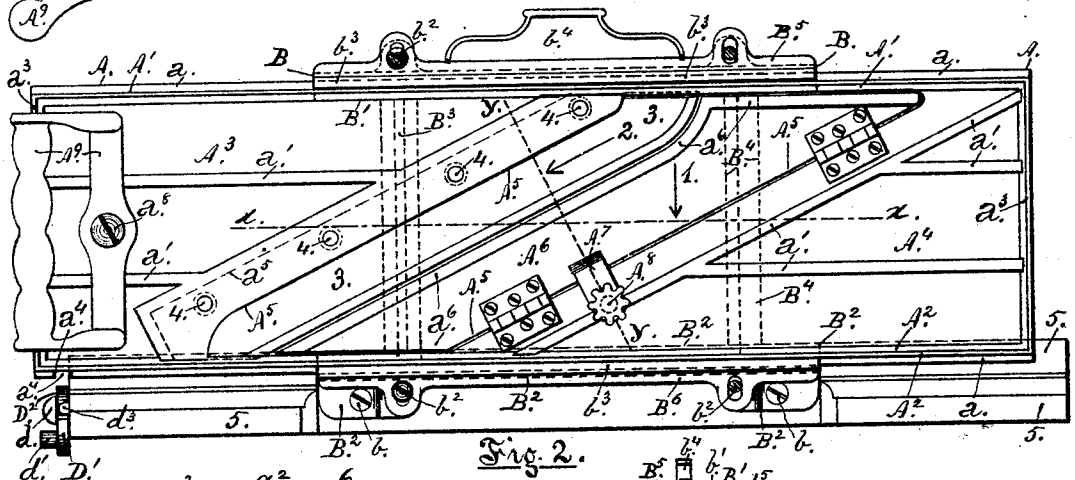

Fig. 2.

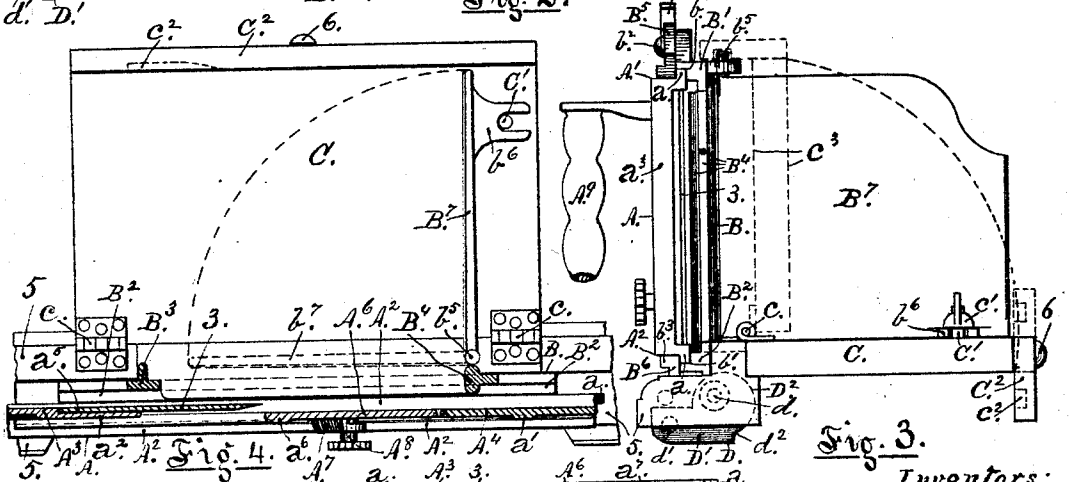

Fig. 3.

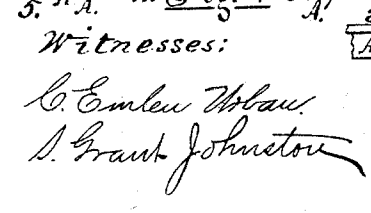

Fig. 4.

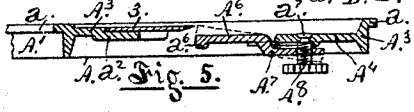

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

Fig. 9.

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ANTHONY ISKE AND ALBERT ISKE, OF LANCASTER, PENNSYLVANIA.

SLICING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 519,959, dated May 15, 1894.

Application filed June 27, 1893. Serial No. 478,986. (No model.)

To all whom it may concern.

Be it known that we, ANTHONY ISKE and ALBERT ISKE, citizens of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Slicing-Machines; and we do hereby 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.

This invention relates to improvements in that class of slicing machines which are especially adapted to the slicing or chipping of dried-beef, bologna-sausage, radishes, potatoes, and the like; and in which the cutting is done by an inclined knife-blade rigidly secured in position to a vertical plate having a reciprocating motion, back and forth, in guide grooves formed in parallel strips or rails secured to the framework of the machine.

The object of the invention is to provide a hinged plate or gate, in front of the knife-blade, and a set-screw, swiveled, whereby the free edge of said gate may be moved toward or from the cutting edge of the knife, to regulate the thickness of the cut or chip, more sensitively, conveniently and quickly than can be done in slicers of this class as they have heretofore been constructed.

The particular features of the invention will more clearly appear in the following description, and will be distinctly set forth in the claims.

The purposes of the invention are attained by the mechanism and devices illustrated in the accompanying drawings, in which similar letters and figures of reference designate like parts throughout the several views, and in which—

Figures 1, 2 and 3 are, respectively, a plan, a front and an end elevation of a slicing machine embodying the elements of the invention. Fig. 4 is a plan of the central portion below the line $x\ x$, viewed from the direction of the arrow 1 in Fig. 2; Fig. 5, an end view of the portion of the reciprocating knife-rack to the left of the line $y\ y$, viewed from the direction of the arrow 2, in Fig. 2. Figs. 6, 7, 8 and 9 are views showing details in the construction.

In the drawings A designates the sliding or knife supporting rack which is preferably made of cast iron in one body, practically rectangular in form. It consists of top and bottom rails A′ and A^2, each provided along its inner edge with a projecting rib a, which ribs are oppositely disposed and adapted to move back and forth in guide-grooves yet to be described. These rails are joined by two plates A^3 and A^4 set in separate parallel vertical planes, so as to be off-set with each other, best shown in Figs. 4 and 5, which off-set should always be equal to the depth of the thickest chip it is desired to cut; and the plates have an oblique opening A^5 between them, best shown in Fig. 2, against the oblique sides of which are secured the cutting knife and gaging plate both to be hereinafter described and this gaging plate is a distinctive feature of the present invention. The plates are provided on the outside with strengthening ribs a' and a wide strip a^2, is placed along the oblique edge of the plate A^3 to better support the said cutting blade, while the top and bottom rails are also joined by vertical end ribs a^3, flush with their outer edges, and the guide-rib a of the bottom rail is provided near its left hand end with a notch a^4 to be engaged by a locking plate yet to be described. Into the back of the wide strip a^2, is formed a recess a^5, into which is placed the knife or cutting blade 3 and, by means of screws 4 tapped into said strip, it is rigidly secured to said plate, see Figs. 2, 4 and 5. In front of the knife, and filling the rest of the opening A^5, is fitted a plate or adjusting gate A^6, provided along its top and bottom and forward oblique edges with outwardly projecting ribs a^6 to strengthen said gate, while its oblique rear edge is hinged to the oblique forward edge of the plate A^4. This gate is also provided on its outer face with a rearwardly projecting arm A^7 having tapped through its free end a thumb or finger screw A^8 which has its extremity a^7 loosely swiveled into said plate A^4, whereby said gate may be readily adjusted to regulate or gage the thickness of the cut, see Figs. 2 and 4, but it is best shown in Fig. 5. The outer face of the plate A^3, near the left hand end of the rack A, is provided with a handle A^9, to reciprocate said rack; said

handle, by means of a pin a^8, being pivoted to said plate so as to oscillate with the motion of the actuating hand.

To support the knife-rack in working position a metallic frame B is provided, which may be integrally made as one casting, and it consists of two horizontal rails, an upper one B′ and a lower one B^2, joined near their extremities by vertical posts B^3 and B^4. The lower rail, within a recess, is secured vertically in place by screws b to the forward face of a wooden base 5. Along the forward edges of these rails, and oppositely disposed, are formed angular recesses b', Figs. 3, 8 and 9, having a depth a trifle greater than the width of the top and bottom rail-ribs a before described, forming a portion of the guide grooves to engage said ribs, while strips or plates B^5 and B^6, secured in place against said edges, by screws b^2, serve to complete said groove. These plates are provided along their opposing edges with outwardly projecting flanges b^3, forming bearing faces against which the top and bottom rails of the knife-rack ride. The orifices through which the screws b^2 pass are made vertically oblong, (shown in Fig. 2,) so that said plates may be raised or lowered at pleasure to take up any lost motion that may occur between said rack and plates. The upper plate is provided with an ornamental center piece b^4 which may serve as a name-plate. Rearward of the post B^4, having its inner face in line with the inner face of said post, is pivoted the forward end or edge of a door or gate B^7, by means of trunnions or pivot pins b^5, which project upward and downward from said end, the upper one passing through, extending slightly beyond, an orifice in a rearwardly projecting lug from the top-rail, B′, of the frame, and the lower one, into an orifice or socket formed in the upper face of the wooden base, 5. Near the rear end of the gate, and projecting outward from the lower edge of its outer face, is a two-pronged lug or jaw b^6 to engage a vertically disposed screw and to receive the action of a thumb-nut to hold said gate fixed in opened position. This gate, extended rearward and fixed in position, Fig. 1, forms a rest for the articles to be chipped or sliced; and it may be folded forward against the supporting frame as is shown by dotted lines b^7 in Fig. 4.

Extending horizontally rearward from the wooden base, 5, its upper face being level therewith, is an approved platform C, having its forward edge hinged, as at c, to the top of said base. Near the upper right hand corner of the platform is fixed an upwardly projecting screw C′ to engage the lug b^6, before mentioned, and a thumb-nut c', screwed home thereon, serves to secure said gate and platform together. Pivoted centrally to the rear edge of the platform by a screw 6, is a strip C^2, having in its inner face, near the lower edge and left hand end, a prolonged and outwardly sloping recess c^2, shown by dotted lines in Figs. 1, 3 and 4, and by full lines in Fig. 7. The platform, C, forms the base on which the articles to be cut or chipped are placed, and it may be folded upward against the top of the supporting frame; the strip, C^2, supports the rear end of said platform in a level position, and on being reversed on its pivot screw 6, the recess c^2 is brought into position to receive the projecting end of the upper trunnion, b^5, to hold the folded platform in position, as indicated by dotted lines c^3, all of which is best shown in Fig. 3.

Against the left hand end of the wooden base, 5, is rotatably secured a metallic plate D by means of a screw d, the plate consisting of a straight portion D′ provided with an outwardly projecting handle d' near one end, and a curved portion D^2 so placed as to form a notch or angular stop d^2, at the other end thereof, the pivot or rotating point being eccentric of said curved portion. A pin d^3 is placed in this end of the base, as shown, to stop the upward progress of the plate when it is turned in this direction. When the plate, D, occupies the position shown in Figs. 1, 2 and 3, it forms a stop against the edge of a table or board, to hold the machine in place while in use for slicing or chipping; and when it occupies the position shown in Fig. 6, the curved portion, D^2, having entered the recess, a^4, (Fig. 2,) and the stop d^2 having been brought against the knife-rack, said blade serves to securely lock said knife-rack, preventing it from being reciprocated in its guides.

Having now described the invention and set forth the manner in which it is to be performed, what is considered new, and desired to be secured by Letters Patent, is—

1. The combination in a slicing machine, with the knife-rack consisting of a top, and a bottom, rail; off-set plates, in parallel planes, joined to the adjacent sides of said rails, and guide-ribs, oppositely disposed, projected along the inner edges from the outer faces thereof; an oblique opening, between the inner ends of said plates; and a knife-blade, within said opening, secured to the oblique end of one of said plates, of a gage-plate, filling the rest of said opening, and having its rear edge hinged to the oblique end of the other one of said plates, and having means provided whereby the free edge of said gage-plate may be moved either way, by means of said hinges, and securely held in position, substantially as described and for the purpose set forth.

2. The combination in a slicing machine having a reciprocating knife-rack, comprising two parallel rails, having guide-ribs on their outer faces, and off-set plates to join their inner ones, an oblique opening between the inner ends of said plates, and a knife-blade within said opening and secured to the oblique end of one of said plates, with a gage-plate in front of said knife-blade and having its rear edge hinge-jointed to the oblique end of the other one of said plates, and a rear-

wardly projected arm having one end secured to the outer face near the rear edge of said gage-plate, of a thumb-screw having its shaft tapped through the free end of said arm and its forward end loosely pivoted into the adjacent off-set plate of the knife-rack, substantially as described and for the purpose set forth.

3. The combination in a slicing machine, having grooved guide-ways in the vertical face of its supporting frame-work, as hereinbefore described, with a knife-rack, as described, movable back and forth in said guide-ways, of an actuating handle as described, having its base plate rotatably pivoted near to an end of the front face of said knife-rack as shown, substantially as described and for the purpose hereinbefore set forth.

4. The combination in a slicing machine having a base piece 5, as shown, to support the frame-work thereof, and grooved guide-ways in the front vertical face of said frame-work, with a reciprocating knife-rack having guide ribs projected vertically outward from its upper and lower parallel faces, and movable back and forth in said guide-ways, and a locking notch placed in the lower rib near to the left-hand end of the rack, of a locking plate, such as hereinbefore described, rotatably pivoted to the adjacent end of said base, 5, substantially as described and for the purpose set forth.

5. The combination in a slicing machine, with the upper and lower guide rails B′ and B^2 of the frame-work, having the angular recesses b' and b' and the upwardly and downwardly projected lugs with the screws b^2, as described, and the knife-rack A, as described, movable back and forth between said guide-rails as shown, of the flanged retaining plates having the oblong orifices as shown adjustably secured, by means of said screws b^2, to the front faces of said guide-rails, substantially as described and for the purpose set forth.

6. The combination in a slicing machine, having a frame-work, as described, supported by a base-piece 5, as shown, with a supporting platform having its front edge top-hinged to the rearward edge of said base-piece, of a supporting strip, centrally and reversibly pivoted to the rear edge of said supporting platform, and having an outwardly sloping and elongated recess in its inner face, near to the lower edge and left-hand end of said strip, substantially as described and for the purpose hereinbefore set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

ANTHONY ISKE.
ALBERT ISKE.

Witnesses:
EDWIN BOOKMYER,
ZURIEL SWOPE.