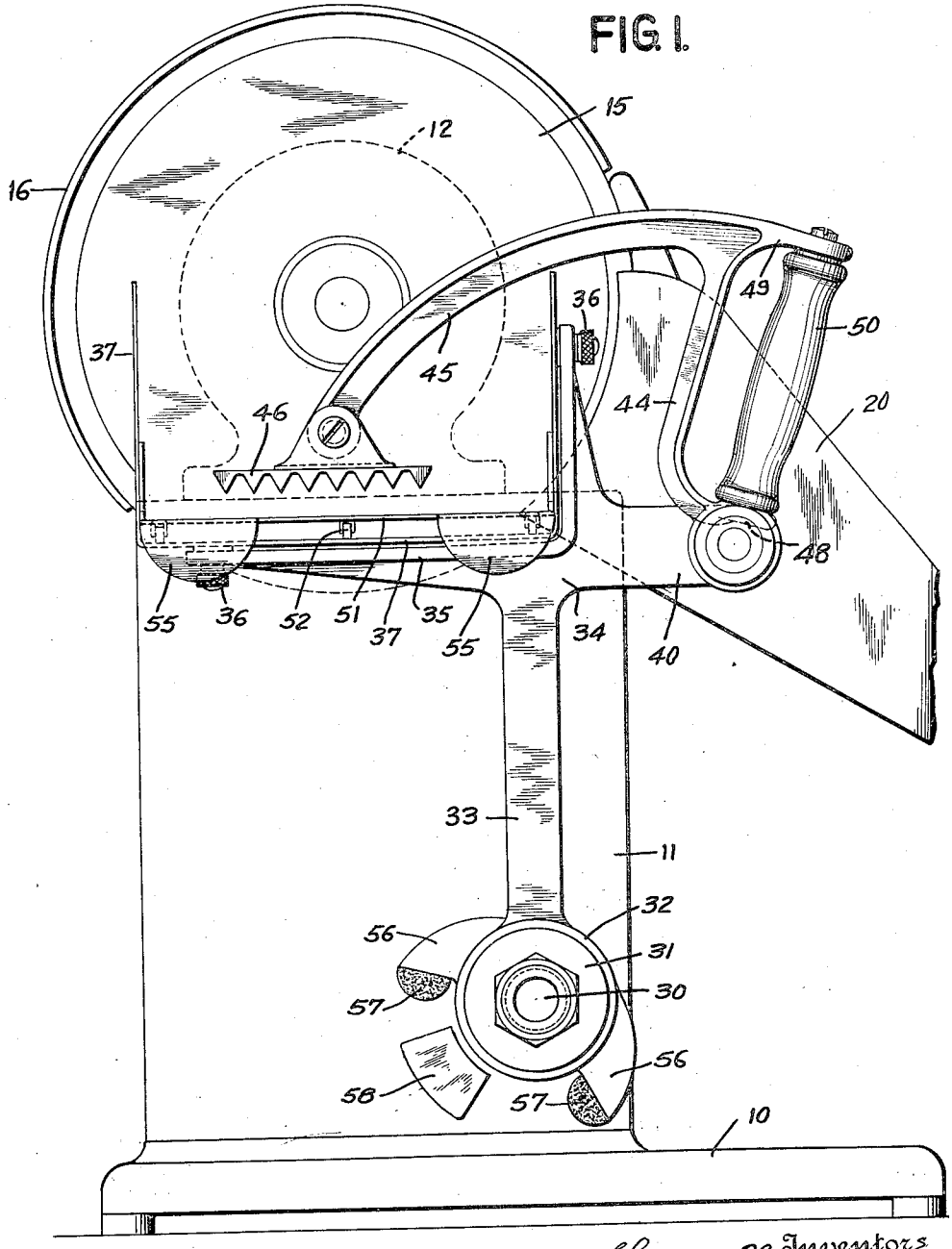
Oct. 8, 1935. T. H. STRACHAN ET AL 2,016,689

SLICING MACHINE

Filed July 10, 1931 2 Sheets-Sheet 1

FIG. 1.



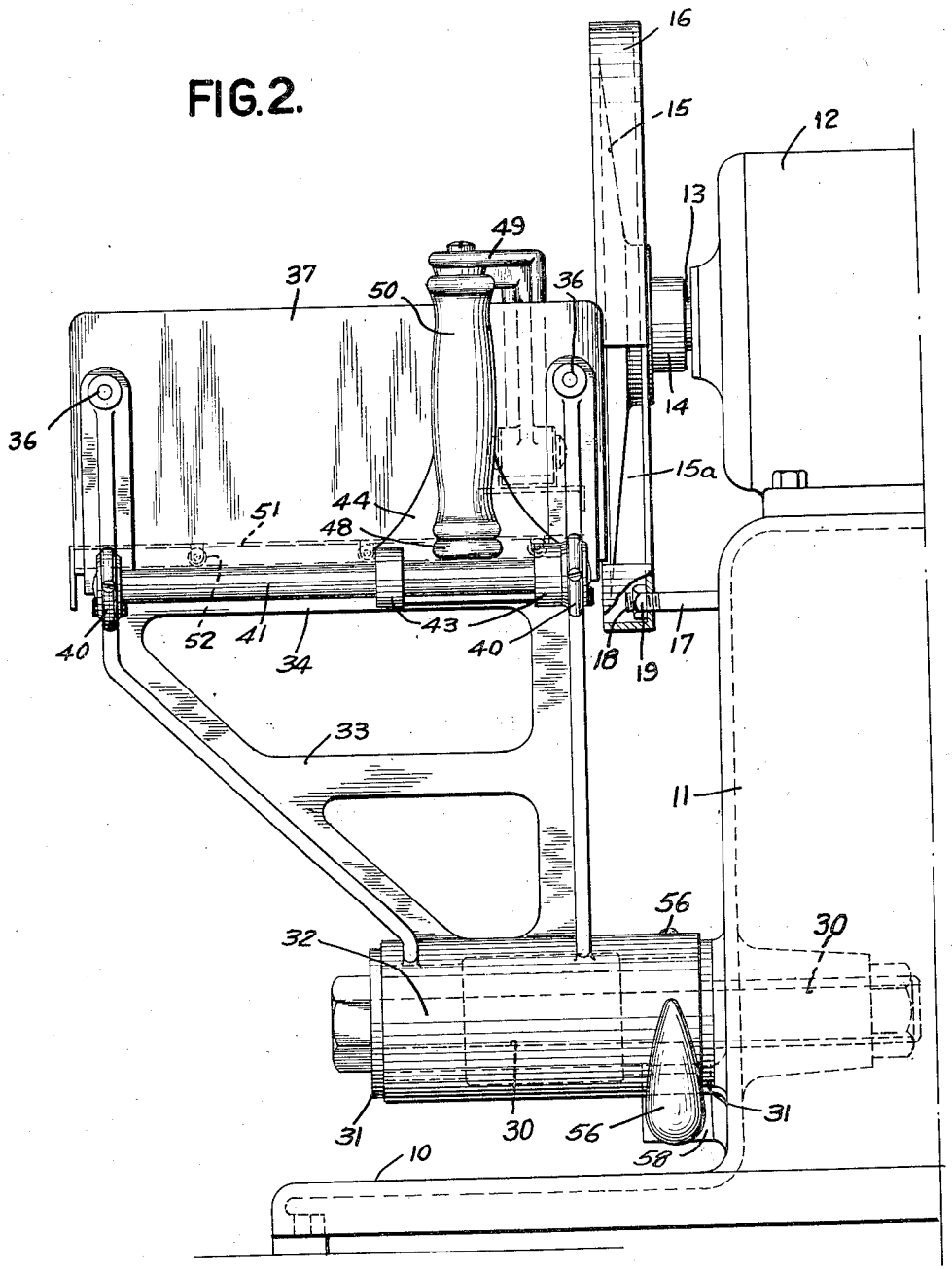
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Thomas H. Strachan
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By their Attorney
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FIG.2.



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2,016,689

UNITED STATES PATENT OFFICE

2,016,689

SLICING MACHINE

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Application July 10, 1931, Serial No. 549,889

5 Claims. (Cl. 146—102)

This case relates to slicing machines and particularly to the motor driven type.

The object of the invention is to provide a novel means for feeding an article to a knife to be sliced.

Another object is to provide means for forcibly clamping an article on the forward stroke of the traversing carriage and in the same motion as when feeding the carriage forward.

Various other objects and advantages of our invention will be obvious from the following particular description of one form of mechanism embodying the invention or from an inspection of the accompanying drawings; and the invention also constitutes certain new and novel features of construction and combination of parts hereinafter set forth and claimed.

In the drawings:

Fig. 1 is a front view of a slicer from the feeding side, and

Fig. 2 is an end view of the slicer from the right side of Fig. 1.

Referring to the drawings in detail the base frame 10 has an integral upstanding pedestal or column 11 on top of which is mounted the motor 12. The motor shaft 13 is directly connected to the hub 14 of a disk knife 15 which is guarded around its periphery except for the cutting portion 15a by the circular guard housing 16 attached to the pedestal 11 by means of studs 17 projecting laterally from pedestal 11 and having a threaded portion 18 projecting into the housing 16 and fastened to the latter by means of a nut 19. At the side of the disk knife 15 is a gage plate 20 supported and adjusted in any suitable, well-known manner.

Extending from pedestal 11 is a stud 30 to which are fixed bushings 31 on which is freely pivotally mounted the sleeve 32 at the lower end of the bracket 33 depending from carriage 34. The latter has a tray portion 35 to which is secured by screws 36 a trough 37 formed up of sheet metal and having two parallel vertical sides and a bottom. The carriage has rearwardly projecting arms 40 between which is fixed a rod 41. Slidable and rotatable on this rod are the bearing sleeves 43 of a clamp frame 44 which has integral therewith an arm 45 overhanging the adjacent side of the trough 37. To the free end of arm 45 is pivoted a toothed upper clamp plate 46 disposed over the bottom of trough 37. Between the lugs 48 and 49 of clamp frame 44 is journalled a handle 50 by means of which the clamp and carriage may be moved. A supplementary article supporting plate 51 is disposed over the bottom of the trough 37. The plate 51 is free to move along the trough towards the gage plate and knife, rollers 52 on the plate facilitating such movement. The vertical sides of the plate engage the vertical sides of the trough to constrain the plate to move generally at right angles to the knife plane. To limit the movement of the supplementary supporting plate towards the knife and to provide means for handling the plate depending ears 55 extend from the rear edge of the plate. The ears are adapted to engage the rear edge of the carriage 34 to limit movement of the plate 51. Sleeve 32 is formed wtih diametrically opposite lugs 56 having rubber tips 57 for engaging the lug 58 extending from the column 11. In operation, the article is placed on the plate 51 with the forward edge of the plate substantially under the forward edge of upper clamp 46.

The gage plate 20 being set for proper thickness of slice, the operator grasps handle 50 to swing the carriage 34 clockwise, as viewed in Fig. 1. The operator then moves the clamp 44, while pressing on the meat, towards the gage plate 20 to engage the article with the latter. The carriage is then swung counter-clockwise across the cutting portion 15a of the knife to cut a slice from the article, thickness of which is determined by the setting of the gage plate. While moving the carriage counter-clockwise the operator may exert as much pressure as he desires on the article by pressing forwardly on the upper end of the handle 50 and urging it counter-clockwise relative to the carriage. In this manner, at each reciprocation of the carriage, a slice is cut by the knife. The operator may swing the clamp clockwise relative to the carriage so as to relieve the pressure on the clamp of the article and enable the supplementary plate 51 holding the article to be shifted to suitable position relative to the upper clamp.

While there has been shown and described and pointed out the fundamental novel features of the invention as applied to a single modification, it will be understood that various omissions and substitutions and changes in the form and details of the device illustrated and in its operation may be made by these skilled in the art without departing from the spirit of the invention. It is the intention therefore to be limited only as indicated by the scope of the following claims.

We claim:

1. A slicing machine comprising a generally vertical knife, a gage plate alongside and generally parallel to the knife, a carriage having an underlying article supporting surface, pivot

means mounting the carriage to reciprocate across the gage plate and knife to cause the knife on the forward stroke of the carriage to cut a slice from the article, a clamp for gripping an article against said carriage surface, a carrier for the clamp, a pivotal connection between the carrier and carriage having its effective rocking axis extending generally horizontal, angularly to the gage plate and knife and in a plane adjacent the plane of the lowest position of the clamp, and a handle on said carrier adjacent said pivot axis and remote from the clamp to which continuous pressure is applied in the direction of forward movement of the carriage to first rock the carrier about said axis to engage the clamp with an article on the supporting surface and after the clamp has been stopped by the article move the carriage through its forward stroke while simultaneously continuing by said pressure on the handle to force the clamp downwardly against the article.

2. A slicing machine comprising a generally vertical knife, a gage plate alongside and generally parallel to the knife, a carriage having an underlying article supporting surface, pivot means mounting the carriage to reciprocate along the gage plate and knife to cause the knife on the forward stroke of the carriage to cut a slice from the article, a clamp for gripping an article on the supporting surface, a carrier for the clamp, a pivotal connection between the carrier and the carriage at the side remote from the knife at the beginning of the forward stroke of the carriage, the pivotal connection providing a rocking axis for the carrier extending generally horizontal, transverse to the gage plate and knife and substantially adjacent the lowermost position of the clamp, and a handle on said carrier to which a continuous pressure applied thereto towards the knife at the beginning of the forward stroke of the carriage rocks the carrier about said axis to first engage the clamp with the article on the supporting surface and after the clamp is stopped by the article to move the carriage through its forward stroke while simultaneously continuing by said pressure on the handle to force the clamp downwardly against the article.

3. A slicing machine comprising a generally vertical knife, a carriage having an underlying article supporting surface, means mounting and guiding the carriage for reciprocation past the knife edge to cause the knife to cut a slice from the article on the forward stroke of the carriage, a clamp above said carriage surface for gripping an article thereagainst, an arm carrying the clamp at one end, said arm being forked at the opposite end with the forks spaced vertically, a pivot connecting the lower fork to the carriage and extending generally horizontally and angularly to the direction of carriage movement, and a generally vertical handle carried between the upper and lower forks to which pressure is applied to rock the arm about said pivot to first move the clamp against the article and after the clamp is stopped by the article moving the carriage through its forward stroke while simultaneously continuing by said pressure on the handle to force the clamp downwardly against the article.

4. A slicing machine comprising, in combination, a slicing knife, a carriage, an arm supporting said carriage and pivoted at a point below said carriage whereby said carriage may be oscillated back and forth to move the material on said carriage past the cutting edge of the knife, an actuating handle extending upwardly from said carriage and positioned at one side thereof, the said mounting being such that the axis of the pivot for supporting the carriage lies in a plane intersecting the carriage between the said handle and the material supported by the carriage, said handle being pivotally attached to the carriage, a clamp carrying arm extending from said handle over the carriage, and a clamp carried by said clamp carrying arm beyond the said intersecting plane, whereby hand pressure upon the handle to cause oscillation of the carriage causes a rotary component of force urging the clamp toward the carriage.

5. A slicing machine comprising, in combination, a slicing knife, a carriage mounted for movement parallel to the cutting plane of said knife to move the material on said carriage past the cutting zone of the knife, an actuating handle extending upwardly from said carriage and positioned at one side thereof, said handle being pivotally attached to the carriage at one side and adjacent the material supporting surface of said carriage, a clamp supporting arm extending from said handle over the material supporting surface of said carriage, and a clamp carried by said arm, whereby hand pressure upon the handle to cause movement of said carriage back and forth past the cutting zone of the knife causes a rotary component of force about the handle pivot urging the clamp toward the material supporting surface of said carriage.

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