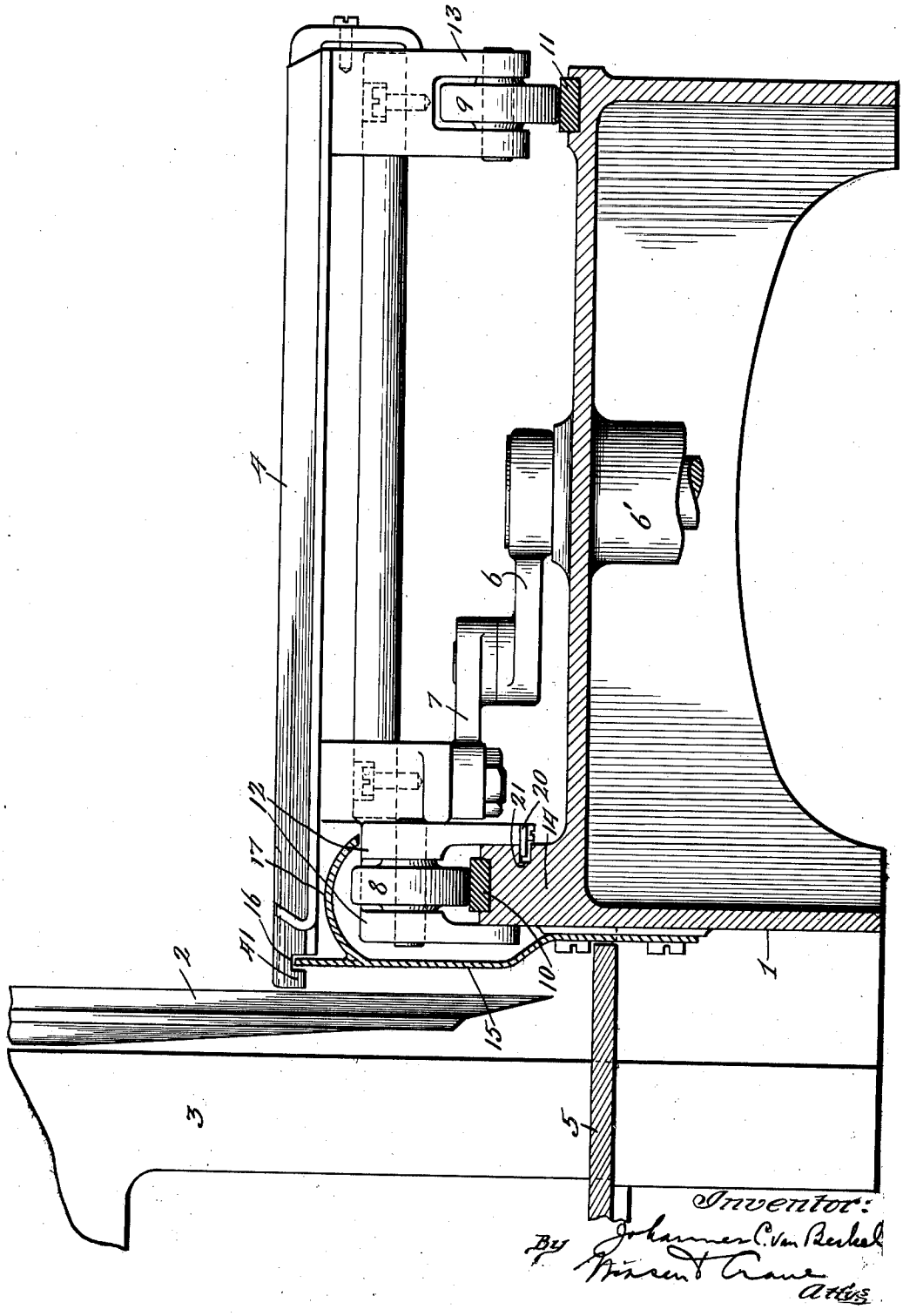
June 6, 1933. J. C. VAN BERKEL 1,913,012

SLICING MACHINE

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UNITED STATES PATENT OFFICE

JOHANNES C. VAN BERKEL, OF COPENHAGEN, DENMARK, ASSIGNOR TO NAAMLOOZE VENNOOTSCHAP MAATSCHAPPIJ TOT VERAARDIGING VAN SNIJMACHINES VOLGENS VAN BERKEL'S PATENT EN VAN ANDERE WERKTUIGEN, OF ROTTERDAM, NETHERLANDS, A LIMITED LIABILITY COMPANY OF THE NETHERLANDS

SLICING MACHINE

Application filed October 26, 1928, Serial No. 315,331, and in Great Britain December 2, 1927.

This invention relates to slicing machines of the type comprising a rotary slicing knife and a carriage adapted to support the substance to be sliced and to carry it recurrently past the slicing knife so that slices may be cut in succession from it. As the slices are cut, they generally pass to some form of receiving-plate beneath and beyond the knife.

In such machines, the substance-supporting carriage is borne by one or more tracks, or guides, and, in most constructions, mechanism for operating the carriage and/or the knife is located beneath the carriage. As a result, the slices are liable to be contaminated with oil as they pass from the carriage and also as they lie on the receiving-plate.

The object of the present invention is to obviate the aforesaid liability, and, to this end, the invention comprises a slicing machine of the type referred to having means adapted to shield the slices from the working parts of the machine, for the purpose of preventing oil or other contaminating matter being deposited directly on the slices, or being thrown on the slicing knife and thereby deposited on the slices.

In order that the invention may be clearly understood one constructional form thereof, chosen as an illustrative example, will now be described with reference to the accompanying drawing, which is a fragmentary end view of a slicing machine showing certain parts thereof in section.

In the drawing, the numeral 1 denotes the stationary base of the machine, 2 denotes the rotary knife, which is journaled in a stationary bracket 3, 4 denotes the substance-supporting carriage and 5 denotes the slice-receiving plate.

In the construction shown, the carriage 4 is intended to be reciprocated past the knife by means, well known in the art, including a crank 6, rotatably mounted at 6′ in the base 1, and a connecting rod 7 interconnecting the crank and the carriage, which latter is provided with track elements or rollers 8 and 9 riding on track elements or rails 10 and 11 extending along the base. Preferably, there are two rollers 8 and one roller 9, but a plurality of rollers may be provided at either side, or both sides, if desired. The rollers 8 and 9, respectively, are journaled in brackets 12 and 13 forming parts of the carriage 4, and an extension 20 on the bracket 12 acts in conjunction with a recess 21 in the part 14 of the base supporting the rail 10, as a guide for the carriage.

A plate 15 secured to one side of the base 1 and extending throughout the entire length thereof, is disposed between the knife 2 and the base, and its top edge loosely enters a longitudinal groove 16 in the under side of an overhanging part 41 of the carriage 4, thereby providing an effective seal between the plate and the carriage. The plate 15 serves as a shield between the adjacent working parts of the machine above the base (i. e. the roller or rollers 8, rail 10, crank 6 and connecting rod 7) and the knife and receiving-plate, so that slices passing from the overhanging part 41 and the knife to the receiving plate cannot come in contact with any of the aforesaid working parts, nor can oil be thrown from said parts against the knife or directly on the slices either during their passage to the receiving plate or when they are lying thereon.

The numeral 17 denotes a plate which may be secured to and extend along the plate 15 so as to cover the roller or rollers 8 and the rail 10, and thus shield these parts from falling particles of fat, meat, and the like.

The constructional form described and illustrated may be modified without departing from the scope of the invention. For instance, the substance-supporting carriage need not be reciprocatory, but might be oscillatory or rotary, and instead of the rollers and rails, track elements in the form of sleeves sliding on guide bars may be used.

Obviously those skilled in the art may make various changes in the details and arrangement of parts without departing from the spirit and scope of the invention as defined by the claims hereto appended and I wish therefore not to be restricted to the precise construction herein disclosed.

Having thus fully disclosed an embodi-

ment of my invention, what I desire to secure by Letters Patent of the United States is:

1. A slicing machine comprising a base member, a track thereon, a carriage, rollers on said carriage engaging said track, a knife, and a guard member extending over said rollers and track and between said knife and rollers, said guard member having means co-operating with said carriage to prevent passage of foreign material therebetween in the ordinary use of said slicing machine comprising a tongue and groove connection.

2. The combination with a slicing machine having a slicing knife, a substance supporting carriage, mechanism for moving said carriage past the cutting edge of said knife, of a guard positioned between the face of the knife and said mechanism for shielding the slices cut by said knife from said mechanism, said carriage having a recess in the under side thereof for receiving the top edge of said guard, rollers for supporting said carriage during its movement and an extension on said guard overlying said rollers during substantially the entire reciprocation of said carriage.

3. In a slicing machine, the combination with a slicing knife, a base, a substance supporting carriage, cooperating track elements carried by said carriage and base for guiding said substance supporting carriage past said knife, mechanism for moving said carriage past the cutting edge of said knife, and means for guarding said mechanism and track elements from foreign matter thrown by said knife during the operation of the machine either in the form of grease or particles of meat and the like, comprising a substantially imperforate plate secured to said base in a position to form an upwardly extending substantially imperforate wall, said plate having an edge thereof overlapping a projection on said supporting carriage, and a plate carried by said first named plate extending over said track elements between said carriage and said track elements.

4. The combination with a slicing machine having a slicing knife, a substance-supporting carriage and mechanism including a guide for the carriage for moving said carriage past the cutting edge of said knife, of a substantially imperforate guard positioned between the face of said knife and said mechanism with a portion thereof overlying the upper surface of said carriage guide throughout substantially the entire operative portion thereof for shielding the slices cut by said knife from said mechanism and preventing contact of said slices with said guide, said guard having an upwardly extending edge thereon and said carriage having a recess in the under side thereof for receiving the top edge of said guard.

In testimony whereof I have signed my name to this specification on this 17th day of September, A. D. 1928.

JOHANNES C. VAN BERKEL.