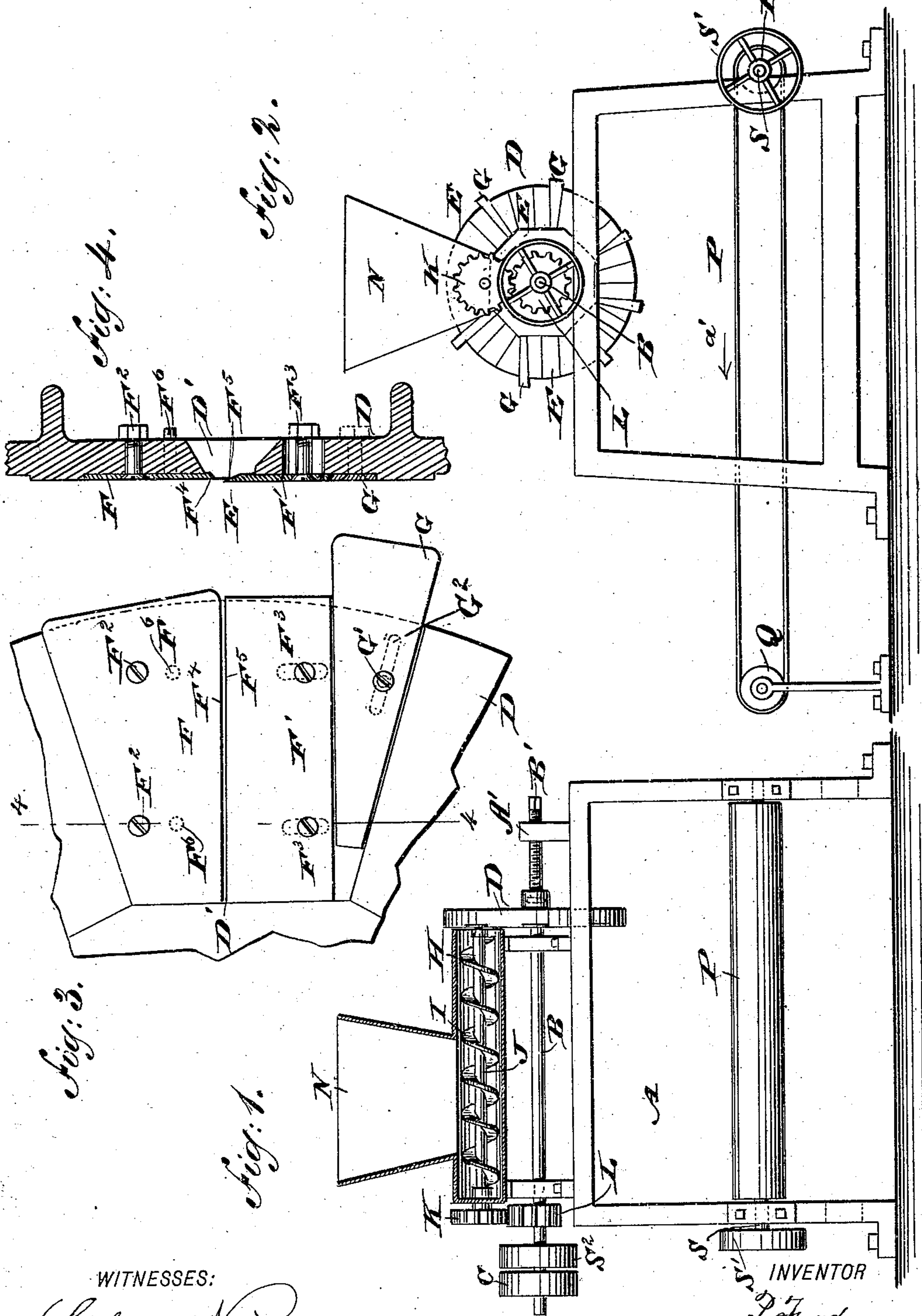


(No Model.)

P. FORD.
SLICING MACHINE.

No. 501.779.

Patented July 18, 1893.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PIERCE FORD, OF CHICAGO, ILLINOIS.

SLICING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 501,779, dated July 18, 1893.

Application filed October 17, 1892. Serial No. 449,124. (No model.)

To all whom it may concern:

Be it known that I, PIERCE FORD, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Slicing-Machine, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved slicing machine, which is simple and durable in construction, very effective in operation, and more especially designed for slicing or cutting grain after it has been steamed or cooked and hulled for preparing a food product.

The invention consists of parts and details, and combinations of the same, as hereinafter more fully described and pointed out in the claim.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of the improvement. Fig. 2 is an end view of the same. Fig. 3 is an enlarged face view of part of the knife wheel; and Fig. 4 is a transverse section of the same on the line 4—4 of Fig. 3.

The improved slicing machine is provided with a suitably constructed frame A, on which is journaled in suitable bearings a main driving shaft B, provided on one end with a pulley C, connected by belt with other machinery for imparting a rotary motion to the said shaft B. On the latter is secured a knife wheel D, supporting in its face sets of knives E, adapted for slicing the material as hereinafter more fully described.

Each set of knives E comprises the gage plate F and the cutting blade F' fastened by bolts F² and F³ respectively or other means, in recesses formed in the web of the wheel, the adjacent edges F⁴ and F⁵ of the respective gage plate F and the cutting blade F' extending close one to the other and one slightly in front of the other in front of an opening D' in the face of the wheel D as plainly shown in Fig. 4. The gage plate F can be adjusted by set screws F⁶ to move the edge F⁴ of the blade transversely nearer to the cutting edge F⁵ of the blade F' to regulate the thickness of the slice to be made. The blade F' can be adjusted on the face of the wheel to compensate for wear or grinding on the cutting edge

F⁵, and for this purpose the wheel is provided with transverse slots for the bolts F³, as plainly shown in dotted lines in Fig. 3 and in full lines in Fig. 4.

In order to relieve the bolts F³ of all cutting strain on the blade F', the latter abuts on its back edge on a wedge G held adjustable on the wheel by a bolt G', passing through an elongated slot G² in the wheel and arranged radially or nearly so to permit an inward movement of the wedge.

Against the cutting face of the wheel D abuts the open end of a tube H, containing a feed screw I, for feeding the material to the cutting face of the wheel, so that the material is cut into slices by the set of knives E, as the wheel D revolves.

In order to hold the cutting edge of the cutting blades F' of the wheel against the open end of the tube H, I provide a screw B', screwing in a suitable nut A' held on the frame A and abutting against one end of the shaft B, so that by screwing up the screw B' the shaft B can be moved laterally to hold the face of the wheel D firmly against the tube to prevent the escape of the material.

The feed screw I is secured on a shaft J, mounted to turn in suitable bearings in the tube H, and on one outer end of the said shaft is secured a gear wheel K, in mesh with the wheel L, secured on the main driving shaft B, so that when the latter is rotated a rotary motion is given to the wheel D, and at the same time a like motion is imparted to the feed screw to feed the material to the cutting face of the said revoluble wheel.

In the top of the tube H is arranged a hopper N, into which the material to be sliced is placed, the material passing from the hopper into the tube H, in which it is fed forward by the revolving feed screw I.

The material sliced by the cutting blade F' of each set of knives E passes through the respective opening D' in the wheel D to fall upon an endless belt P, arranged below the wheel D in the lower part of the frame A. The belt P passes over a roller Q, located a suitable distance from the frame, and also over a second roller R held on a shaft S, journaled in suitable bearings in the frame A. On this shaft S is secured a pulley S', connected by belt with a pulley S² held on the

main driving shaft B, so that when the latter is rotated as above described, a rotary motion is given to the shaft S, whereby the belt P is caused to travel in the direction of the arrow 5 a' , the sliced material being thus carried forward on the belt away from the machine. It will thus be seen that this machine is very simple and durable in construction, and the knives can be readily adjusted in the wheel 10 D for cutting slices of the desired thickness, and the wheel D can be adjusted with relation to the fixed tube H, to prevent the escape of the material between the tube and face of the wheel.

15 Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A slicing machine comprising a revoluble wheel carrying sets of knives, each set containing a gage plate and a knife blade, a feed 20 tube engaged at its discharge end by the cutting edges of the said knives to cut the material passing through the tube into slices, a screw for adjusting the said wheel to hold the cutting edges of the knife blades against 25 the said tube, and a feed screw revolving in the said tube in unison with the said knife wheel, the said screw feeding the material to the cutting edges of the said knife blades, substantially as shown and described.

PIERCE FORD.

Witnesses:

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EDWARD H. ERICSON.