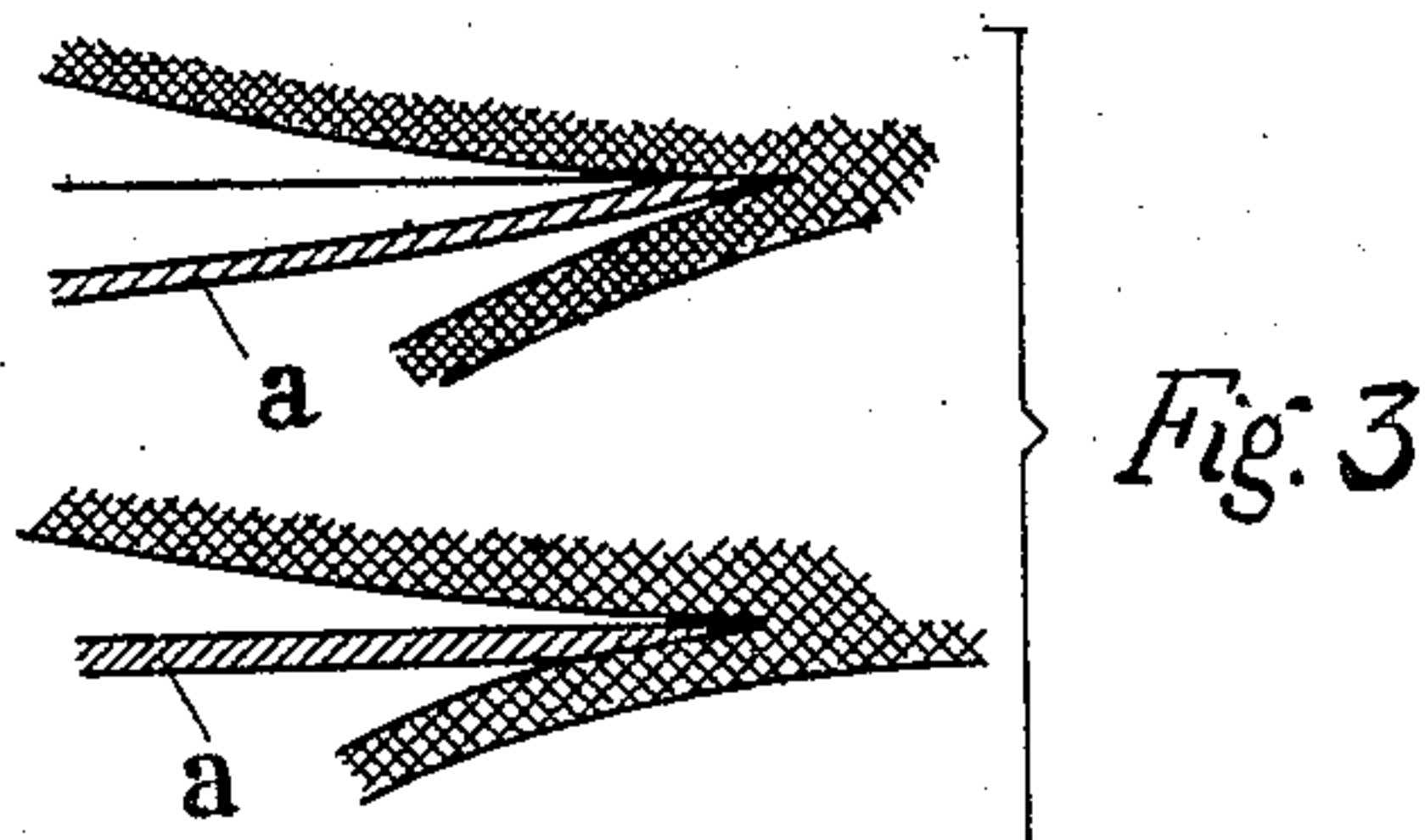
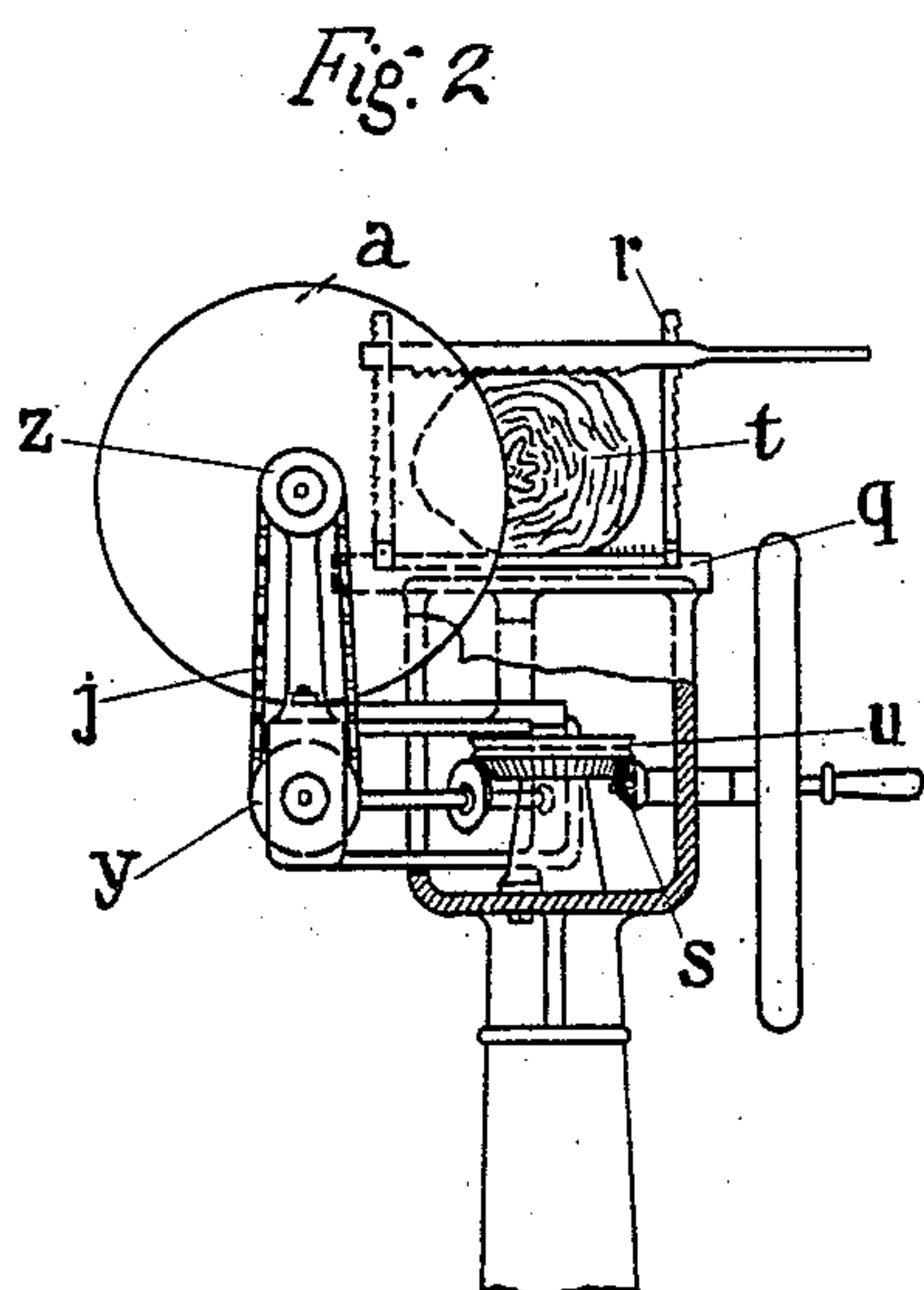
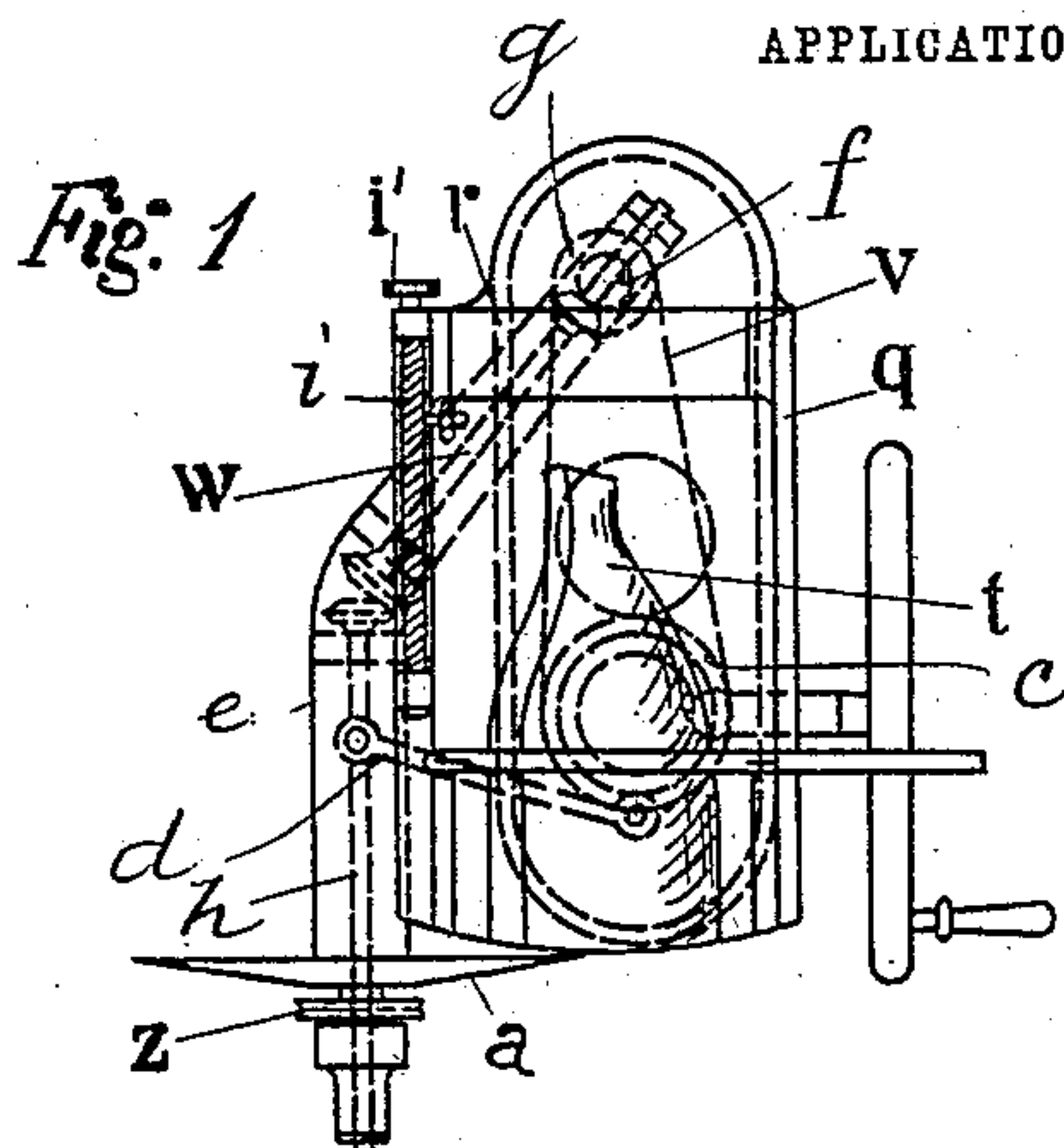


No. 859,034.

PATENTED JULY 2, 1907.

L. ANSHEL.  
MEAT CUTTING MACHINE.

APPLICATION FILED OCT. 4, 1905.



Witnesses:  
M. S. Ryan  
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att.

# UNITED STATES PATENT OFFICE.

LEO ANSHEL, OF DORTMUND, GERMANY.

## MEAT-CUTTING MACHINE.

No. 859,034.

Specification of Letters Patent.

Patented July 2, 1907.

Application filed October 4, 1905. Serial No. 281,353.

*To all whom it may concern:*

Be it known that I, LEO ANSHEL, a subject of the German Emperor, residing at Dortmund, in the Province of Westphalia and Kingdom of Prussia, have invented certain new and useful Improvements in Meat-Cutting Machines, of which the following is a specification.

My invention relates to meat cutting machines of the type in which rotating circular knives or cutters are employed to successively cut thin slices from a piece of meat, which is held in a frame or the like.

The object of my invention is to provide an improved meat cutting machine having a rotating circular cutter, in which the forward movement of the cutter, during the cutting operation, is slower than the backward movement away from the meat, and in which the cutting plane of the cutter, during its advance movement, is continuously changed, so that the cutting face of the cutter is always at an angle with respect to the plane of the cut. The continuous change of the position of the cutter with respect to the cut is accomplished by moving the cutter in an arc whose radius is at an angle, and preferably at a right angle, to the plane of the cut. The slow forward and quick backward movement is effected by the operation of a crank-disk, whose axis is so situated that the point of connection between the connecting bar attached to the said crank-disk and the cutter moves in an arc, which is located at a considerable distance above the axis of rotation of said crank-disk.

On the accompanying drawings Figures 1 and 2 show in top view and side elevation respectively the new machine. Fig. 3 shows the different forms of cutters in the operation of cutting.

Similar reference characters designate similar parts in all the figures.

Referring to Figs. 1 and 2, the rotary cutter *a* is movably mounted to swing back and forth, towards and away from the piece of meat *t*, which is firmly clamped in a frame *r* adapted to reciprocate in guides *q*, and so arranged that during the cutting the meat can be fed successively forward.

The operation of the various parts is effected from a hand wheel *b*, which, when rotated, operates by means of a pinion *s* a crank-disk *u* provided at its under side with teeth engaging the pinion *s*. A rod *d*, fastened to said crank-disk *u*, has its other end pivotally connected with a frame *e*, adapted to swing around a pivot *f* and carrying at its outer end the rotary cutter *a*, the arrange-

ment being such that, if the crank-disk *u* is rotated around its axis by turning the hand-wheel *b*, the cutter frame *e* is, by means of the connecting rod *d*, swung back and forth in an arc. Fastened to the crank-disk *u*, or made integral therewith, there is provided a sprocket-wheel *c*, which is rotated together with the crank-disk *u*, and rotates, by means of chain *v* (Fig. 1) a similar sprocket-wheel *g*, having its axis of rotation coincident with the fulcrum *f* of the cutter frame *e*. The sprocket-wheel *g* imparts its own rotary movement by means of a shaft *w* and gearing to a shaft *h*, both shown in Fig. 1 in dotted lines, the shaft *h* being rotatably journaled in frame *e*. At the forward end of shaft *h* is mounted thereon a sprocket-wheel *y* driving through a chain *j* a sprocket-wheel *z* and thus rotating the circular cutter *a*, secured on the axis of said sprocket-wheel *z* the said axis being mounted in a bracket *e'* of frame *e*. Each time, the cutter *a* is swung backward, the frame *r* holding the piece of meat is fed forward by means of a screw-spindle *i*, shown in Fig. 1, the spindle being turned by hand by means of a small thumb screw *i'*.

In Fig. 3 two different cutters are shown, to illustrate the cutting operation, the cutter *a* shown in the upper figure being a hollow ground cutter and the cutter shown in the lower figure being a straight disk cutter. In each case, the cutting edge occupies the position of a tangent with relation to the periphery of a circle, the cut being effected therefore in the shape of an arc, the cutting edge at all times during the cutting operation occupying the same angular position with respect to the cut face of the meat.

What I claim is:—

A meat slicing machine comprising a reciprocating frame adapted to hold the meat, a frame pivoted so as to swing back and forth in an arc towards, and away from, the said reciprocating frame, a sprocket wheel rotatably mounted in said swinging frame, a circular cutter mounted on the axis of said sprocket wheel, a crank disk, a rod secured thereto and pivotally connected to said swinging frame, means between said crank disk and said sprocket wheel to impart the rotation of the former to the latter thereby rotating the rotary cutter, and means to successively feed forward the reciprocating frame holding the meat.

In testimony whereof I affixed my signature in presence of two witnesses.

LEO ANSHEL.

Witnesses:

OTTO KÖNIG,

J. A. RITTERSHAUS.