

No. 842,919.

PATENTED FEB. 5, 1907.

L. SWANK.
CHEESE CUTTER.

APPLICATION FILED MAY 31, 1906.

2 SHEETS—SHEET 2.

Fig. 4.

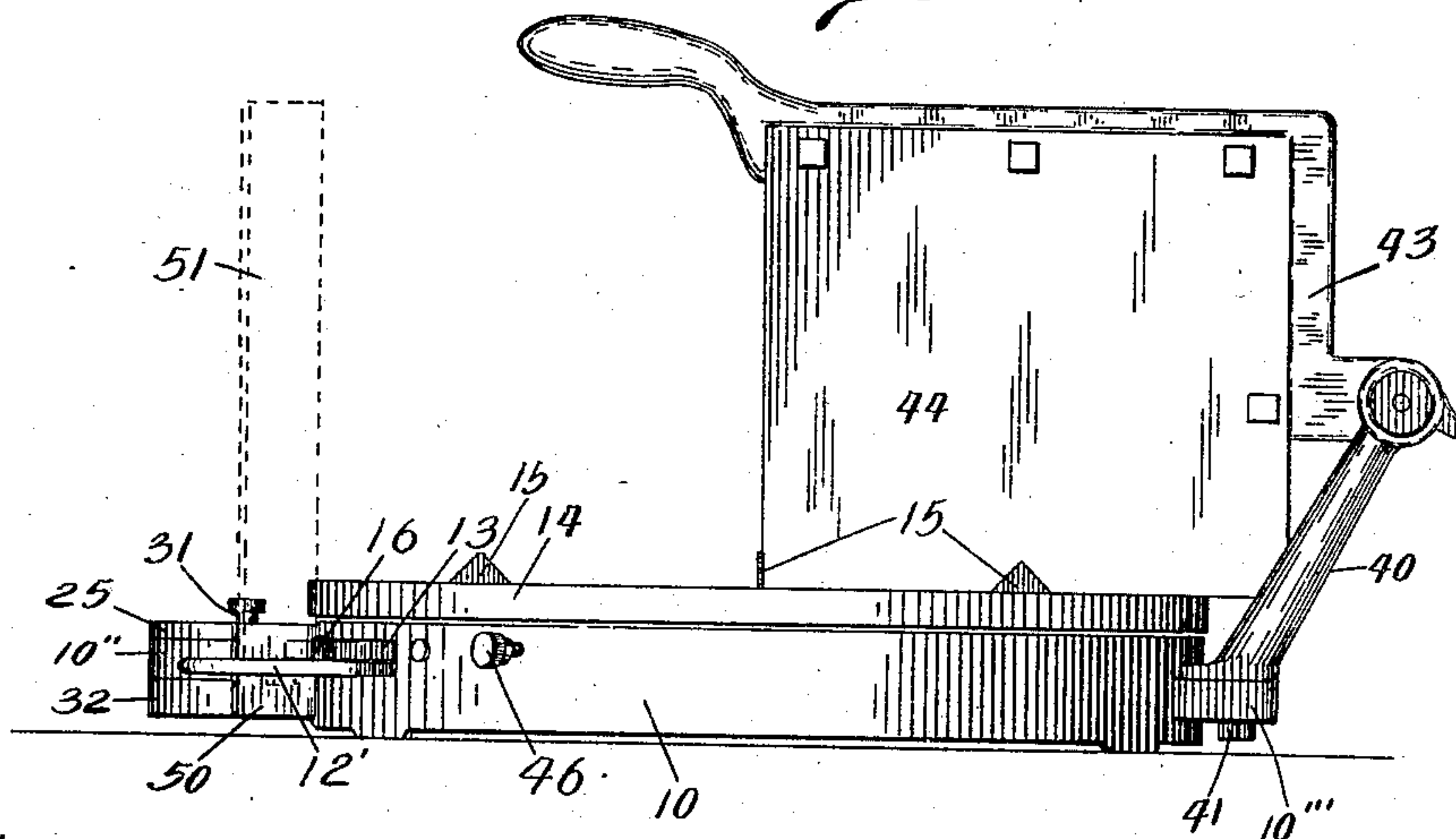


Fig. 5.

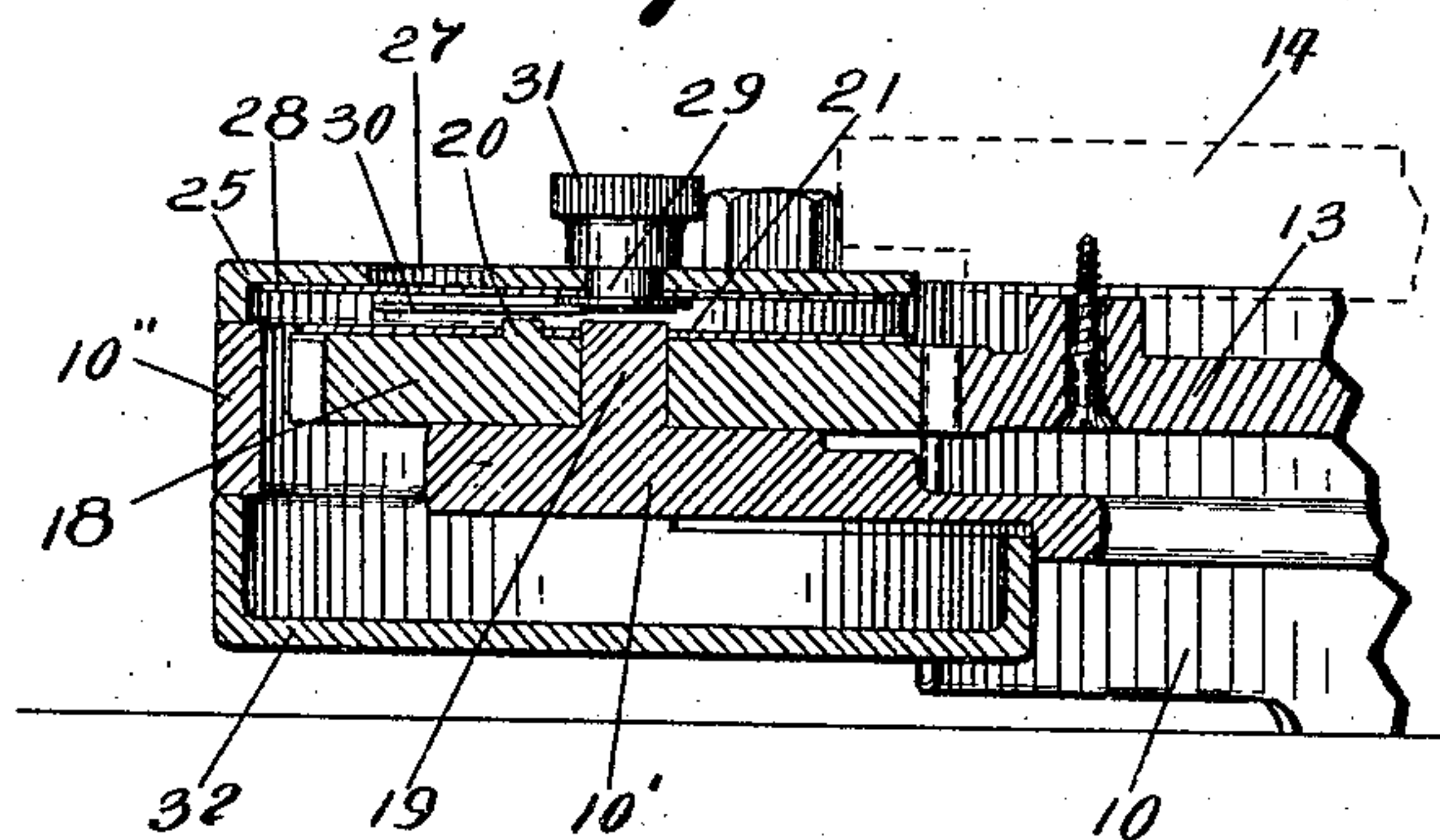


Fig. 6.

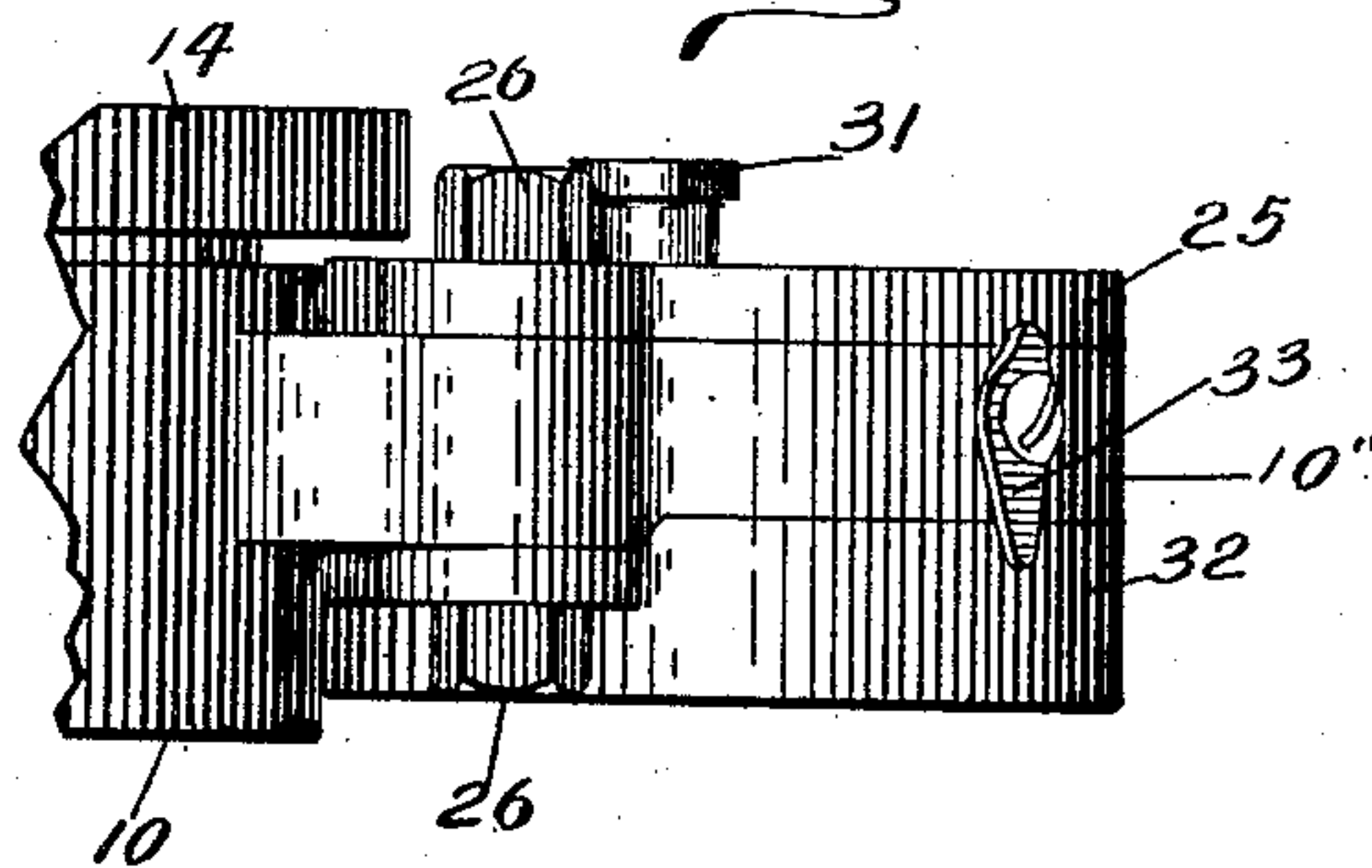
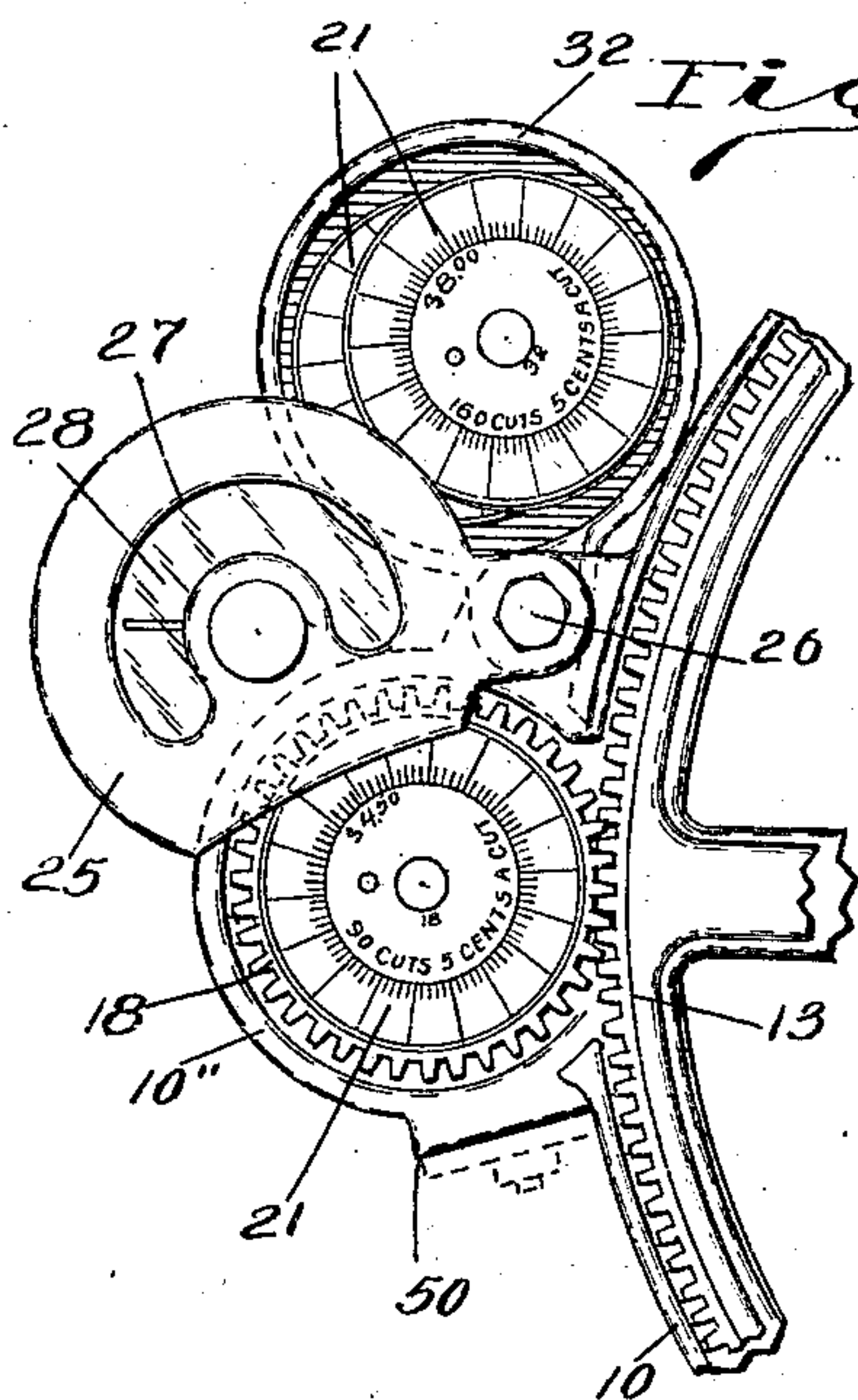


Fig. 7.



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UNITED STATES PATENT OFFICE.

LAFE SWANK, OF ANDERSON, INDIANA, ASSIGNOR TO AMERICAN CHEESE CUTTER COMPANY, OF ANDERSON, INDIANA, A CORPORATION OF INDIANA.

CHEESE-CUTTER.

No. 842,919.

Specification of Letters Patent.

Patented Feb. 5, 1907.

Application filed May 31, 1906. Serial No. 319,443.

To all whom it may concern:

Be it known that I, LAFE SWANK, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Cheese-Cutters, of which the following is a specification.

In the retailing of cheese of the disk type it is convenient to have a machine by means of which desired slices from the cheese may be accurately measured and cut. Such machines are, however, in most cases too large to be contained in the usual cheese-boxes of a refrigerator; and the object of my present invention is to make such improvements in details of construction of a cheese-cutter that it may be readily used on a counter in the winter and by easily-made changes modified for reception and use in a refrigerator.

A further object of my invention is to make such other improvements in details as shall be pointed out.

The accompanying drawings illustrate my invention.

Figure 1 is a perspective view of my improved cutter with all of the various parts in assembled position; Fig. 2, a perspective view of a desirable form of hand-knife; Fig. 3, a partial sectional plan of a convenient means for shifting the cheese-carrying table and means for holding it in any desired position; Fig. 4, a side elevation of the form as used on a counter with the refrigerator attachment shown in dotted lines; Fig. 5, a central vertical section through the indicator mechanism; Fig. 6, a rear elevation of the indicator-box and adjacent portion of the table; Fig. 7, a plan of the table-carrying gear and adjacent indicator-box, the storage-box and cover being swung outward for clearness of illustration.

In the drawings, 10 indicates a suitable base supporting a pin 11 at its center. Journaled on the pin 11 is an arm 12, which extends out beyond the circumference of the base to form a handle 12'. Also journaled on the pin 11 above the arm 12 is a gear 13, to the upper face of which is attached a circular table 14, provided on its upper face with spuds 15, adapted to enter the lower face of a cheese, so that it will be held firmly in position to rotate with the table. The table 14 is free to be turned by hand, and its accurate adjustment will in most cases be

effected by the operator grasping the circumference of the table with both hands and turning it upon its pivot. As an additional means for turning the table 14 in one direction, however, I mount a pawl 16 upon the arm 12, said pawl being adapted to engage the teeth of the gear 13.

The teeth of gear 13 mesh with a pinion 18, the diameter of which is considerably smaller than the diameter of the table, so that a single rotation of the table will cause several rotations of the gear 18. Gear 18 is journaled upon a stud 19, carried by an extension 10' of the base 10. Gear 18 carries upon its upper face a stud 20, which is eccentric to the stud 19 to receive any one of a number of gage-disks 21, each of which is suitably perforated to receive the studs 19 and 20, so as to be rotated with the pinion 18, and each of which is suitably subdivided to indicate degrees of advancement.

The pinion 18 is contained within a cylindrical extension 10'' of the base 10, said cylindrical extension being open at its top. The open upper end of the cylindrical-extension 10'' is closed by a swinging cover 25, which is pivoted on a bolt 26 so as to swing in a horizontal plane. Cover 25 is provided with a segmental sight-opening 27, which is covered by a suitable transparent member 28. Journaled in cover 25, centrally above stud 19 when the cover is closed, is a pin 29, which carries a radially-extending pointer 30 on its inner end and is provided with a knurled head 31 at its outer end, the arrangement being such that the pointer 30 extends radially over any disk 21 which may be placed on the upper face of pinion 18. Pivoted upon the lower end of bolt 26 is a box 32 of substantially the same size and shape as the extension 10'', and this box is adapted to receive the supply of disks 21 not immediately in use.

The cover 25 and box 32 may be held in closed position by a turn-button 33, mounted upon the extension 10''.

The base 10 is provided on the side opposite the extension 10'' with ears 10''', to which a bracket 40 is detachably secured by means of bolts 41. Pivoted to the upper end of bracket 40 is a knife-arm 43, carrying a square knife 44, the inner vertical edge of which extends to the axis of table 14 in a usual well-known manner.

In order to hold the table in any desired

position, I mount on the inside of base 10 a spring-finger 45, the free end of which lies immediately adjacent the outer ends of the teeth of gear 13, and said spring may be urged into frictional contact with the outer ends of said teeth by means of a small screw 46, threaded through the outer wall of base 10.

The structure thus far described is too high for convenient operation within the cheese-box of an ordinary refrigerator, and in order to adapt the machine for such use I provide the base 10 with a radially-extending surface 50, upon which may be bolted a vertical bar 51 by means of a bolt 52, said bar extending vertically to a distance considerably higher than any cheese to be cut and transversely lying substantially in a radius of the table 14. I then provide a hand-knife 53, which is sharpened along one edge and the end, the bevel being entirely from one side toward the other, so that said other side will be perfectly straight. The knife 53 is carried by a handle member 54, through which extends a vertical slot 55, the thickness of which is substantially equal to the thickness of bar 51, while its width is somewhat greater than the width of bar 51 and is so arranged with relation to the blade 53 that when the handle member 54 is slipped over bar 51 the flat face of blade 53 will lie substantially in a radial plane of the table 14.

When the machine is to be used on a counter, the bar 51 is removed and the operation will be like the operation of the usual cheese-cutter of this type, the operator using the arm 12 to drive the cheese-carrying table in one direction, if desired, or using both hands to shift the table and accurately adjust it in accordance with the desired indicator-disk 21 placed upon the pinion 18. When a desired quantity of cheese is to be cut, the operator will set the pointer opposite any desired mark on the proper disk 21 and will then move the table until a sufficient number of the disk graduations have been carried past the pointer, the table being turned freely in either direction until it has been accurately set.

When the machine is to be placed in a refrigerator, the bracket 40 is detached and the bar 51 attached. In this form the cheese after proper advancement by rotation of the table 14 will be cut by the hand-knife 53, the width of slot 55 being such as to permit sufficient reciprocation of the knife-blade radially of the table 14 to facilitate cutting.

When used as a counter-machine, the knife 44 may be used as a protector for the freshly-cut face of the cheese by leaving it in its lowest position and tightening the screw 46, thus holding the table 14 against accidental displacement.

I claim as my invention—

1. In a cheese-cutter, the combination,

with a suitable supporting-base, of a cheese-carrying table rotatably mounted thereon, means for indicating angular advancement thereof, a pivoted knife supported on said base by means permitting ready removal, a knife-guide carried by said base substantially at right angles to the plane of the table, and a hand-knife cooperating with said knife-guide.

2. In a cheese-cutter, the combination, with a suitable supporting-base, of a cheese-carrying table rotatably mounted thereon, means for indicating angular advancement thereof, a pivoted knife supported on said base by means permitting ready removal, a knife-guide carried by said base substantially at right angles to the plane of the table, and a hand-knife provided with a portion adapted to receive said knife-guide and hold it in a plane substantially radial to the table.

3. In a cheese-cutter, the combination, with a suitable supporting-base, of a cheese-carrying table journaled thereon, a large gear carried by said table, a materially smaller pinion journaled on the base and driven by said gear, an inclosing casing for said pinion having an open top, a swinging cover for said casing and having a sight-opening, a pointer journaled in said cover, and a swinging storage-box mounted on said base beneath the pinion-case.

4. In a cheese-cutter, the combination with a cheese-carrying table and means for accurately indicating angular movement thereof, of a guide-bar arranged adjacent said table substantially at right angles to the plane thereof and substantially in a plane radial to the table, and a hand-knife having a transverse mortise fitting the guide-bar in one dimension and loose thereon in the radial dimension, substantially as and for the purpose set forth.

5. In a cheese-cutter, the combination with a cheese-carrying table, of a guide-bar arranged adjacent said table substantially at right angles to the plane thereof and substantially in a plane radial to the table, and a hand-knife having a transverse mortise fitting the guide-bar in one dimension and loose thereon in the radial dimension, substantially as and for the purpose set forth.

6. In a cheese-cutter, the combination, with a cheese-carrying table, of a guide-bar arranged adjacent said table and substantially at right angles to the plane thereof, and a hand-knife having a transverse mortise fitting said guide-bar in one dimension and loose thereon in the radial dimension.

In witness whereof I have hereunto set my hand and seal, at Anderson, Indiana, this 28th day of May, A. D. 1906.

LAFE SWANK. [L. s.]

Witnesses:

J. E. VAN DEVENTER,
W. L. FINCH.