F. HOSTETTER.

BUTTER CUTTER.

APPLICATION FILED MAR. 15, 1910.

966,688.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 1.

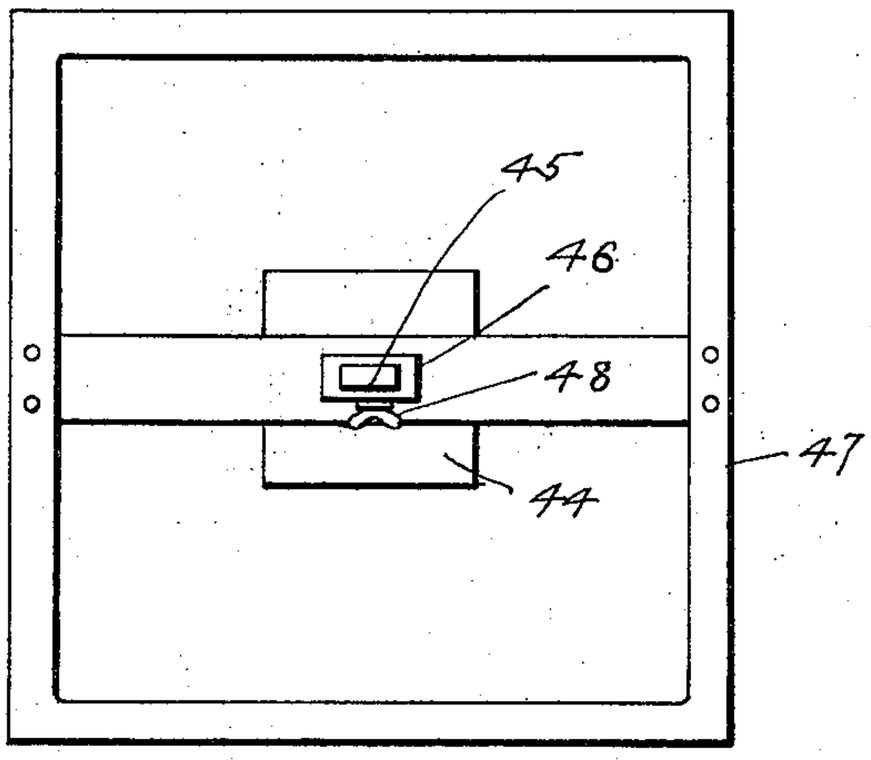

Fig. 8.

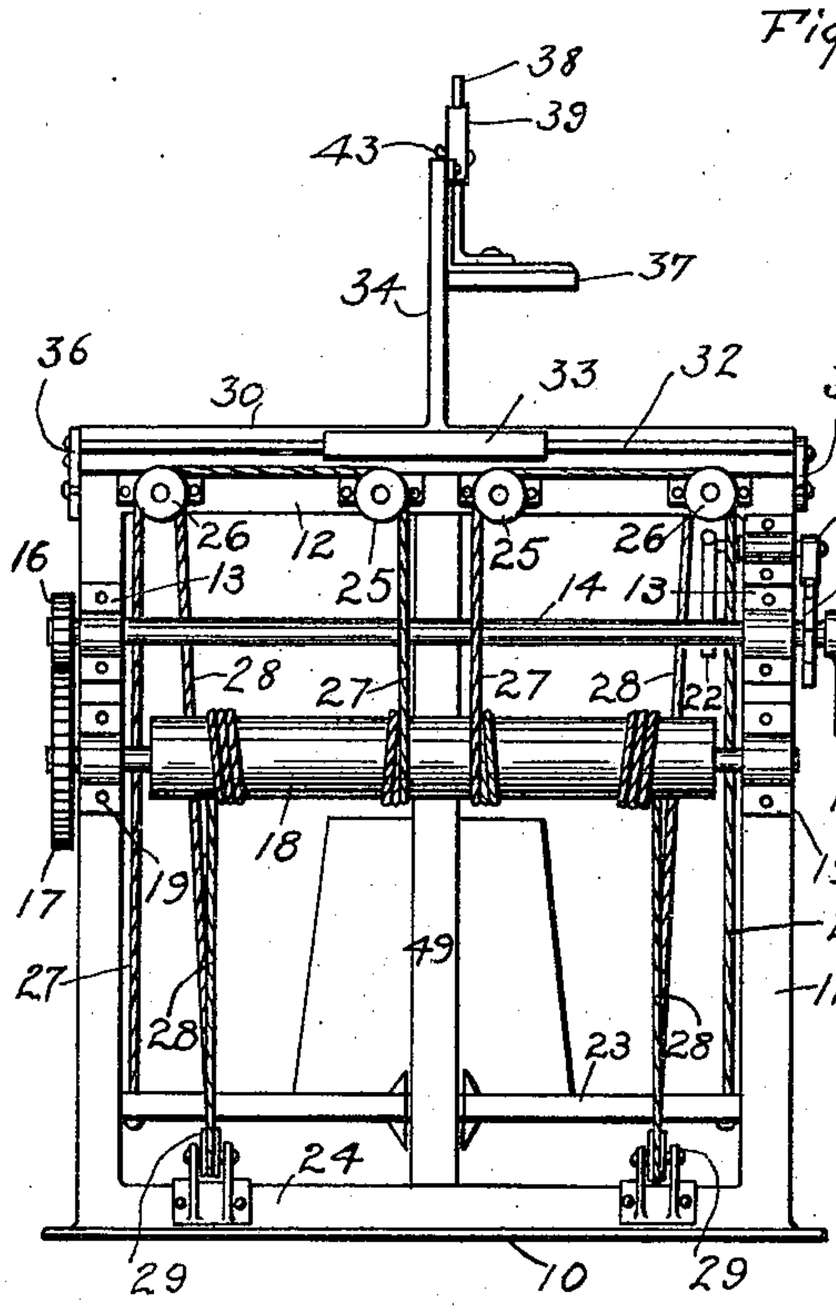

Fig. 1.

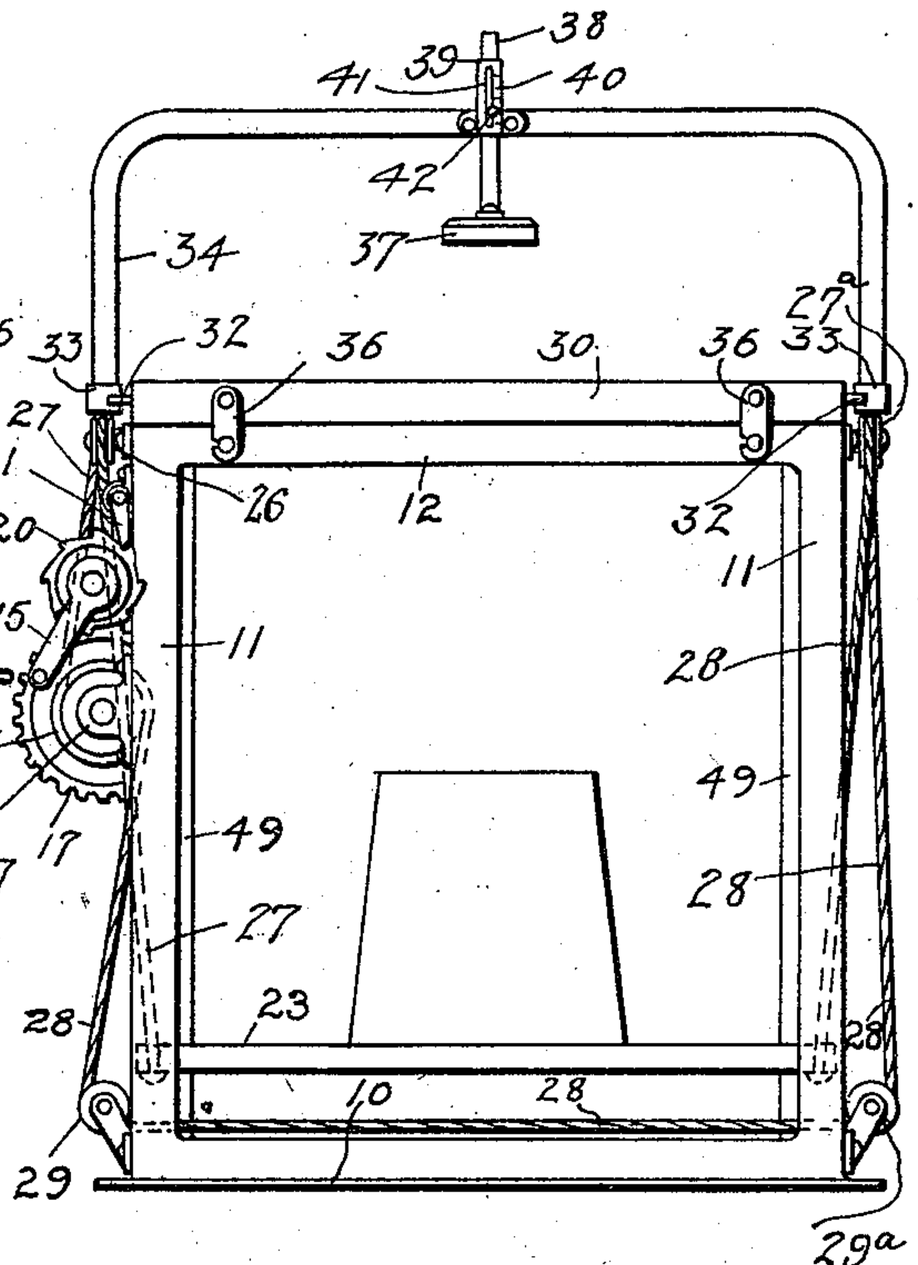

Fig. 2.

WITNESSES

James Terrill

A. C. Schmidt.

INVENTOR

Fred Hostetter

BY

Max A. Schmidt

ATTORNEY

F. HOSTETTER.

BUTTER CUTTER.

APPLICATION FILED MAR. 15, 1910.

966,688.

Patented Aug. 9, 1910.

2 SHEETS—SHEET 2.

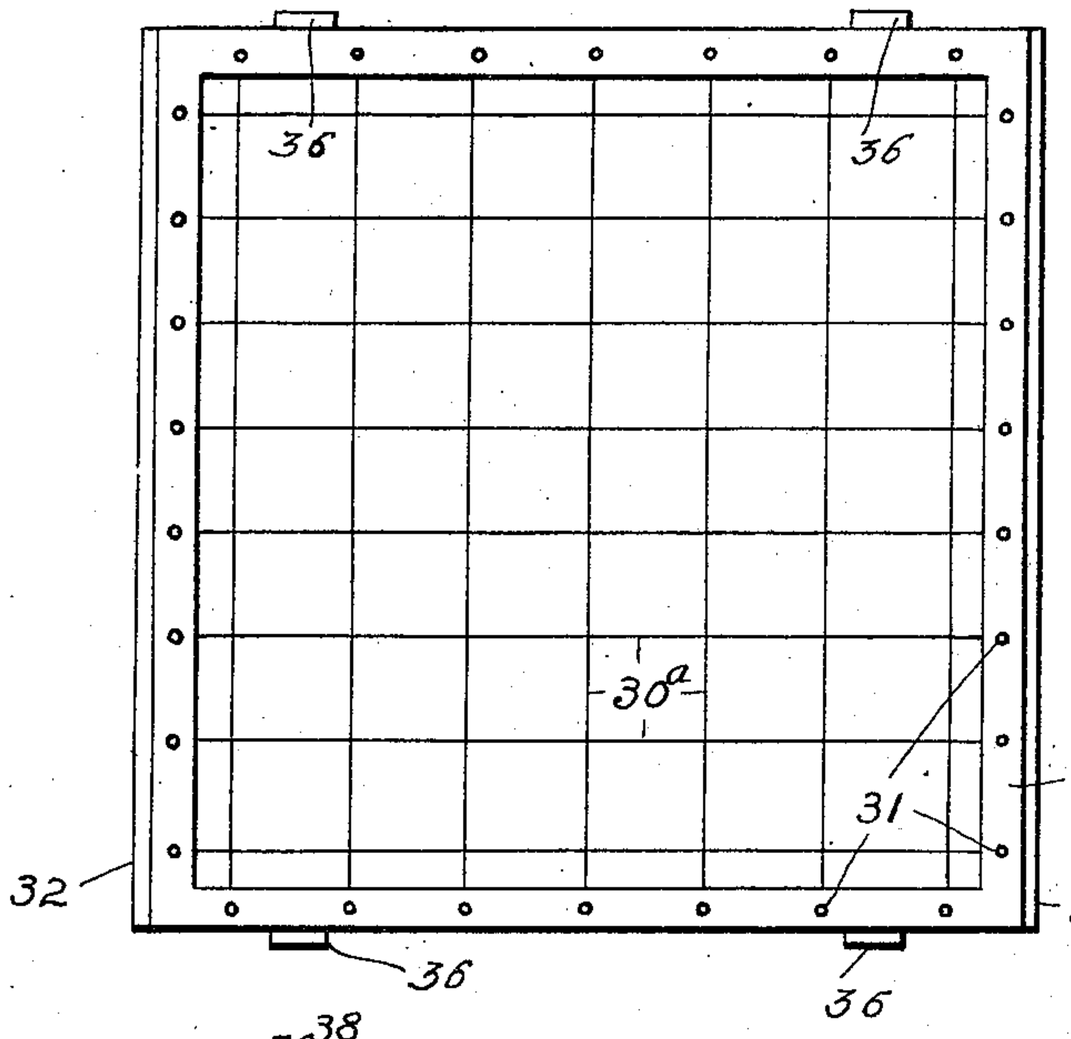

Fig. 3.

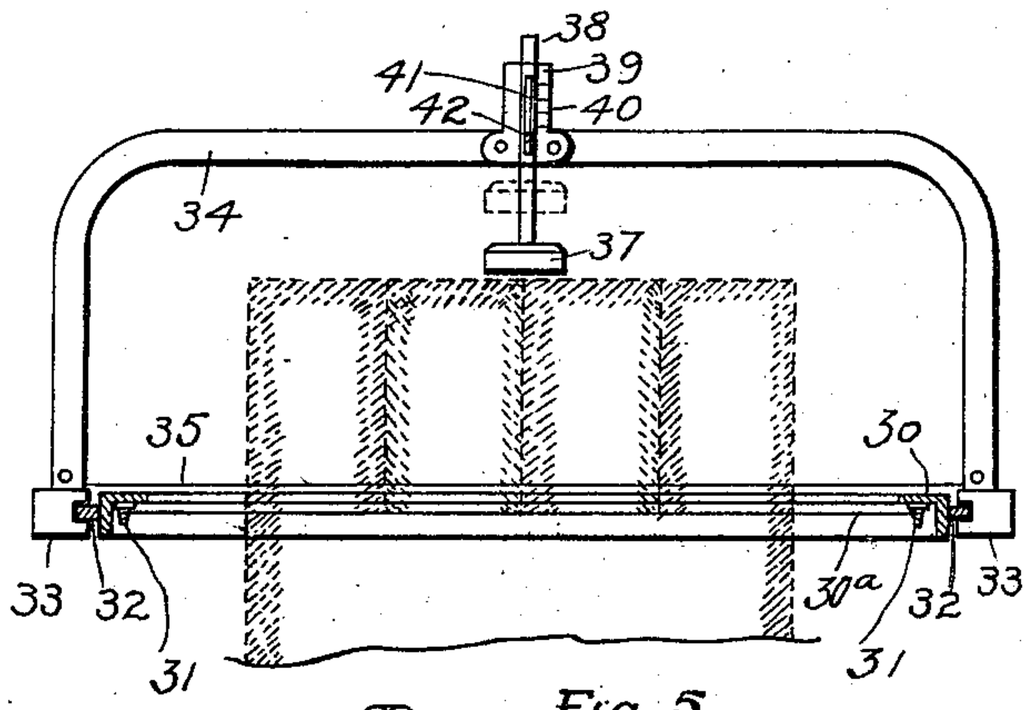

Fig. 5.

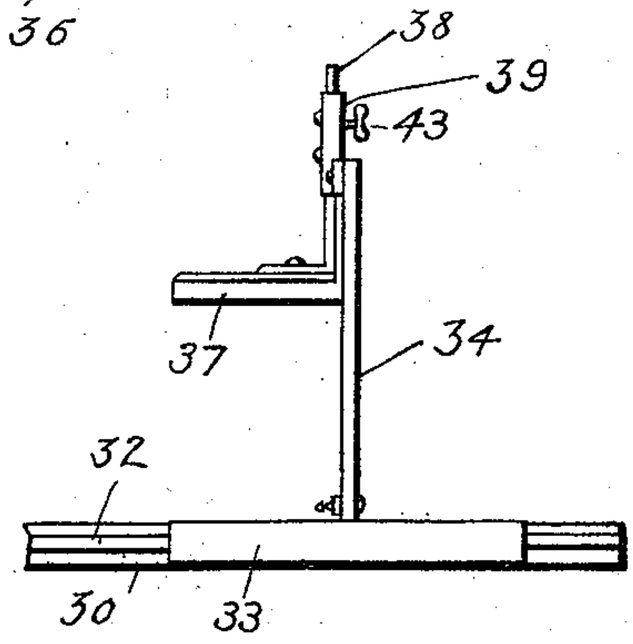

Fig. 4.

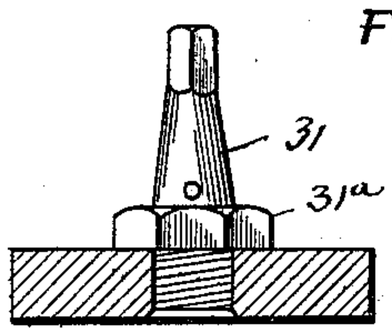

Fig. 6.

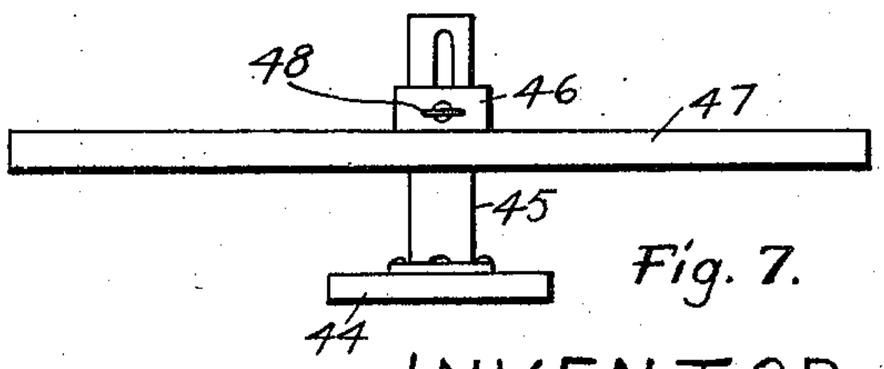

Fig. 7.

WITNESSES

James Terrill

A. E. Schmidt.

INVENTOR

Fred Hostetter

BY

Max A. Schmidt

ATTORNEY

UNITED STATES PATENT OFFICE.

FREDERICK HOSTETTER, OF SPOKANE, WASHINGTON.

BUTTER-CUTTER.

966,688. Specification of Letters Patent. Patented Aug. 9, 1910.

Application filed March 15, 1910. Serial No. 549,534.

To all whom it may concern:

Be it known that I, FREDERICK HOSTETTER, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Butter-Cutters, of which the following is a specification.

This invention relates to butter cutters of that type in which a plurality of cutting strands are provided and so arranged as to divide the mass of butter into cakes or prints of a uniform size or weight.

The invention further consists in a packing device for packing the cuttings and trimmings into a case to be again recut into cakes or prints.

The invention also has for its object to provide a novel device for gaging the action of the cutter so that cakes or prints of the desired size or weight may be produced.

Another object of the invention is to provide a single support and operating device for the cutter and packer, so that the change from one operation to the other may be readily effected.

Other objects of the invention will be apparent from the following detailed description.

In the accompanying drawings, Figure 1 is a front elevation of the apparatus, showing the cutting device in operative position; Fig. 2 is a side elevation; Fig. 3 is a plan view of a portion of the cutting device; Fig. 4 is an end view of the gage; Fig. 5 is a cross section of the cutting device; Fig. 6 is a detail of the device for tensioning the cutting strands; Fig. 7 is an elevation of the packer and Fig. 8 is a plan view thereof.

Referring to the drawings, the supporting frame of the apparatus comprises a base 10 from which rise four corner posts 11 connected at their upper ends by cross bars 12. The corner posts at one end of the frame carry bearings 13 in which is journaled a shaft 14 provided at one end with a crank handle 15, and carrying at its other end a pinion 16 which is in mesh with a spur gear 17 on the shaft of a winding roller or drum 18, said shaft being mounted in bearings 19 carried by the corner posts. On the shaft 14 is a ratchet wheel 20 which is engaged by a pawl 21 mounted on one of the corner posts. This pawl-and-ratchet mechanism is provided for locking the shaft and preventing back slip. The shaft is also provided with a brake 22.

Within the frame of the apparatus is mounted a platform 23, said platform being free to move up and down in the frame for a purpose to be presently described. The platform is operated by means of hoisting lines wound on the roller 18. Beneath the platform, the corner posts, at each end of the frame, are connected by cross bars 24. The cross bars 12 at one end of the frame carry two pairs of pulleys, the members of each pair being indicated at 25 and 26. A line 27 wound on the roller 18 passes upwardly to and over one of the pulleys 25, and thence to and over the companion pulley 26, from which last-mentioned pulley the line passes downwardly to, and is made fast to one of the corners of the platform 23. On the cross bar 12 at the other end of the frame is mounted a pulley 27^a. A line 28 is wound on the roller 18 from which it passes downwardly to and over a pulley 29 on the cross bar 24, and thence straight across to a pulley 29^a on the cross bar 24 at the other end of the frame and thence upwardly to the pulley 27^a. From the last-mentioned pulley the line 28 passes downwardly to and is fastened to the corner of the platform at the end opposite to which the line 27 is made fast. Similar lines are connected to the other corners of the platform.

By the herein described arrangement of guide pulleys a line is connected to each corner of the platform 23, and upon winding said lines on the roller 18, the platform will be elevated. The roller is operated by means of the crank handle 15, through the shaft 14, and gears 16 and 17. A reverse rotation of the shaft lowers the platform, its descent being checked by the brake 22.

The cutting device comprises a rectangular frame 30 across which are stretched a plurality of cutting wires 30^a crossing each other at right angles and spaced uniformly apart so as to form cakes or prints of uniform length and breadth. The height will

be determined by another cutting device to be presently described. The members of the frame 30 are angular in cross section, and one of the flanges thereof carries pins 31 to which the cutting wires 30ª are fastened, and on which they are adapted to be wound by rotating said pins, whereby the wires are drawn taut. The pins are provided with squared heads to afford a hold for a wrench or other tool. The tensioning devices operate in the same manner as the tuning pins of a piano. Lock nuts 31ª are provided for the pins.

On the outside of two opposite members of the frame 29 are outwardly extending flanges 32, which serve to guide the second cutting device which will now be described. This second cutting device comprises two parallel bars 33 connected by an arch 34, between the two branches of which arch, adjacent to the bars, is stretched a cutting wire 35, said wire being fastened and kept taut in the same manner as the wires 30ª. This single wire is adapted to be passed through the mass of butter already partly divided by the wires 30ª and thus complete the cutting operation. The inner edges of the bars 33 have grooves to receive the guide flanges 32.

In operation, the mass of butter to be cut up is placed on the platform 23. The frame 30 is placed on top of the supporting frame of the apparatus, it being held in place thereon by suitable catches 36. The frame 30 is positioned so that the wires 30ª are horizontal, whereby vertical cuts are made in the mass of butter when it is pushed through the wires. The two bars 33 supporting the single cutting wire 35, are placed on the supporting frame of the wires 30ª, as shown in Fig. 5, the flanges 32 entering the grooves of the bars whereby the wire 35 is guided to pass horizontally in a straight line through the mass of butter. The platform 23 is now elevated by means of the hoisting devices already described, it being elevated until the mass of butter has been forced through the spaces between the wires 30ª the desired distance. The wire 35 is now passed through that portion of the butter which has been cut by the wires 30ª which completes the operation, a row of cakes or prints of uniform size being cut off from the mass of butter. As already described, the length and breadth of the cakes or prints are determined by the distance between the wires 30ª. The height is determined by a gage carried by the arch 34. This gage comprises a plate 37 carried on the lower end of a vertical stem 38, slidable up and down in a guide 39 mounted on the arch. The guide has a scale 40 and a slot 41, and on the stem is a pointer 42 extending through the slot and indicating on the scale. A set screw 43 is provided for holding the stem at adjustment. In use, the plate 37 will be set to gage the height it is desired to cut the butter, it being located above the same. The butter will be pushed through the cutting wires 30ª until the top of the mass comes in contact with the plate, whereupon the cutting wire 35 is operated, as already described. By this arrangement of parts the butter can be quickly cut, and the cakes or prints will be of uniform size or weight. After the butter has been cut, the cutter is removed, and a packing device is mounted on the supporting frame to pack the scraps. This packing device is shown in Fig. 7. It comprises a plunger 44 mounted at the lower end of a stem 45 carried in a guide 46, mounted on a frame 47, said frame being mounted on the supporting frame of the apparatus in the same manner as the cutter, after the latter is removed. The plunger stem is held in the guide by a set screw 48. In operation, the scraps are thrown in a receptacle, and the latter is placed on the platform 23, the receptacle being so positioned on the platform that the plunger will enter the receptacle and compress the scraps therein into a solid mass, when the platform is elevated sufficiently. The platform is elevated by operating the crank handle as before. The platform 23 is guided by vertical strips 49 extending between the base 10 and the cross bars 12, at each end of the supporting frame.

The apparatus is simple in construction and can be easily operated, and it effectually serves the purpose for which it is designed.

I claim:

1. A butter cutter comprising a reciprocating carrier, an open frame above the carrier, cutting wires mounted in the frame, a sliding member carried by and movable across the frame, a cutting wire carried by said member above the aforesaid cutting wire, and a gage on the sliding member above its cutting wire.

2. A butter cutter comprising a reciprocating carrier, an open frame above the carrier, cutting wires mounted in the frame, an arch extending across the frame and slidably mounted thereon, a cutting wire carried by the arch above the aforesaid cutting wires, and a gage on the arch above its cutting wire.

3. A butter cutter comprising a reciprocating carrier, an open frame having guides on opposite sides, cutting wires mounted in the frame, slide bars mounted for travel along the frame and engageable with the guides, an arch connecting the bars, a cutting wire extending across the arch above the aforesaid cutting wires, and a gage mounted on the arch above its cutting wire.

4. A butter cutter comprising a support, an open frame removably mounted thereon, cutting wires mounted in the frame, a sliding member mounted for travel along the frame, a cutting wire carried by said member, a gage on said member, said gage being located on one side of the cutting wires, and a traveling carrier located on the other side of said wires and movable in the direction thereof.

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

FRED. HOSTETTER.

Witnesses:
H. E. SMITH,
NETTIE KING.