(No Model.)

S. T. JULL.

MEAT CUTTER.

No. 449,585. Patented Mar. 31, 1891.

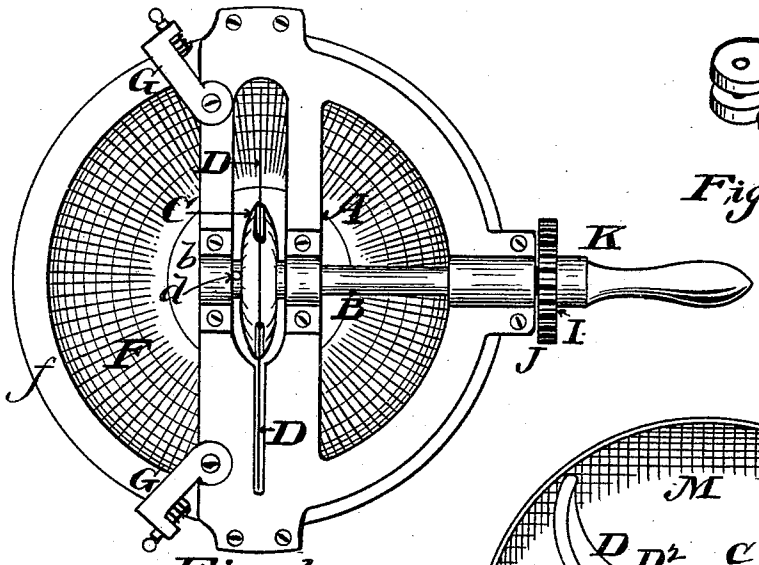


Fig. 1.

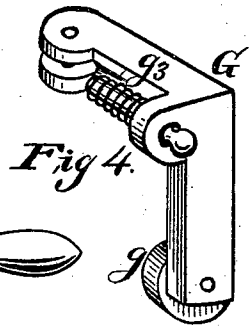


Fig 4.

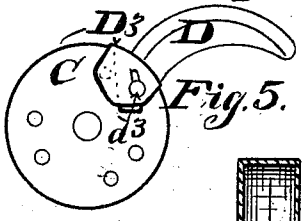


Fig. 5.

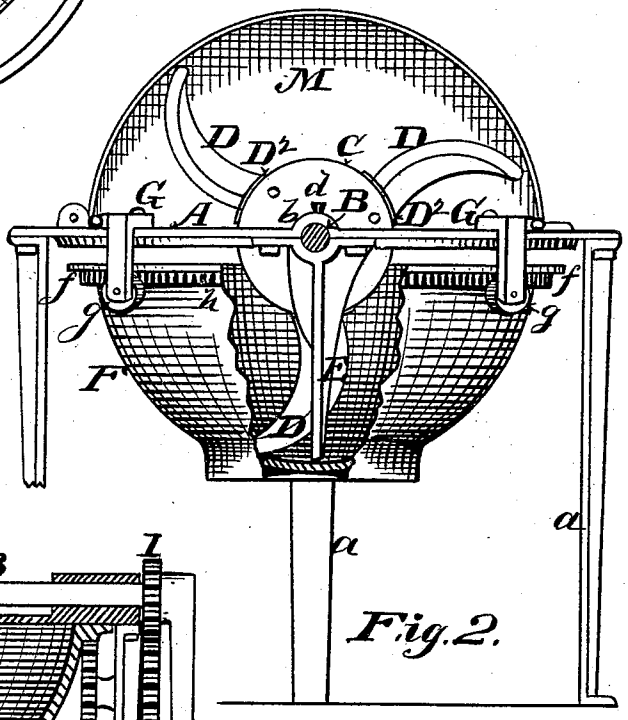


Fig. 2.

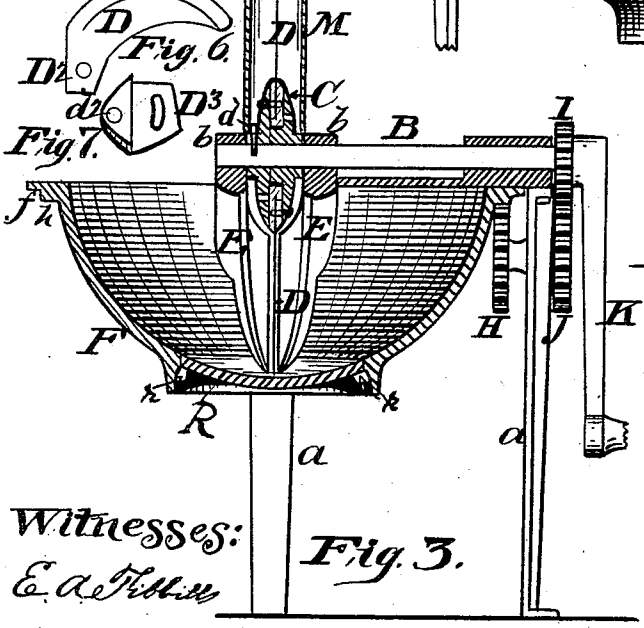


Fig. 3.

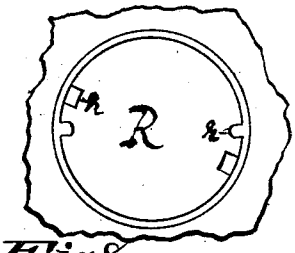


Fig 8.

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL T. JULL, OF MEADVILLE, PENNSYLVANIA, ASSIGNOR TO FARNUM T. FISH, OF SAME PLACE.

MEAT-CUTTER.

SPECIFICATION forming part of Letters Patent No. 449,585, dated March 31, 1891.

Application filed June 26, 1890. Serial No. 356,918. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL T. JULL, a citizen of the United States, residing at Meadville, county of Crawford, and State of Pennsylvania, have invented certain new and useful Improvements in Meat-Cutting Machines, of which the following is a specification.

This invention relates to certain improvements in machines for rapidly cutting up meats, &c.; and it consists in adjustable brackets having rollers in combination with the rotary bowl; also, of blocks and clamp-screws, in combination with the disk-hub and the cutting-blades for adjusting the knives; also, of a removable bottom for the rotary bowl, as additional improvements to my patent granted July 15, 1890, No. 432,242, all substantially as described, and pointed out in the claims.

Figure 1 is a top or plan of the machine. Fig. 2 is a side elevation with part of bowl and cover broken away to show the rotary cutting-blades, &c. Fig. 3 is a transverse vertical section showing the shaft, gearing, and supports for the said rotary cutter, &c. The new views are: Fig. 4 is a detached and enlarged view of the new latch-bolt. Figs. 5, 6, and 7 are respectively detail parts of the knife-adjusting clamp; and Fig. 8 is a view of part of the bottom of the bowl, showing a removable inclosure.

A is a semicircular top frame supported by three legs *a a a*. In the straight portion of said frame is made a slot in which the cutting-blades revolve.

B is a shaft set in bearings *b b*, made in the said frame for that purpose, and on this shaft, located in the aforesaid slot in the frame A, is attached a hub C, consisting of two disks which clamp the cutting-blades D D. In my new arrangement I provide the blades with a shank D^2, having a hole, (seen in Fig. 6,) and I provide one of the disks with two holes for each blade, as seen in Fig. 5.

D^3 is a block having a pin or stud d^2 for insertion in one of the pair of holes in the disk, as seen in said Fig. 5. Said block also has an offset portion the thickness of the blade to provide space for the shank of the blade to occupy between it and the disk, and said thinner portion has a slot through which a bolt d^3 passes for clamping the two disks with the blocks and blades between them.

Whenever the knives are ground for sharpening they are gradually shortened and reduced in size, so that they would not reach the bowl. By the means above described the said blocks D^2 will allow the blades to be turned by loosening the bolts d^3, and their points extended, thus again tightening the bolts. The said blades are very easily adjusted or readily removed. The disks are keyed to the shaft by key *d*.

E is a hanger made in two parts, attached to and depending from the frame A. One of said parts hangs each side of the plane of the cutting-blade's movements, and they are pretty close together for providing edges on both sides of the blades against which the cutting is done. The slot in the frame A on the side where the blades pass upward through is also made narrow for a like purpose, and also prevents the cuttings passing through or following the blades.

F is a bowl having a flange *f*, by which it is supported loosely on adjustable brackets G G, attached to the frame A and provided with rollers *g g* upon which the rim of the bowl rides. The brackets are pivoted to the frame so that they may be turned aside for releasing the bowl for removal, and are provided with a latch-bolt g^2, fixed with a spring g^3, whereby the brackets may be latched or locked in place by the bolts entering holes or notches in the edges of the said ears f^2. Within said flange *f* on the bowl are provided rack-teeth *h*, by which the bowl is rotated.

On the outer end of shaft B is provided a hand-crank K, by which the machine is operated, and on said shaft just outside of the frame is placed a pinion I, and below this on a short shaft having its bearing in the leg *a*, below the frame A, carrying a gear J, meshing with said pinion I. On the inner end of said short shaft is also placed a gear H, meshing with the rack-teeth *h* on the bowl. By this gear mechanism the bowl is given a slow rotative movement simultaneously with the rapid revolutions of the rotating cutting-blades.

The bowl is removable for conveniences of cleaning or emptying by unlatching the brack-

ets and turning them aside. For convenience of emptying a large bowl, however, I provide a removable bottom or inclosure R, consisting of a disk fitting in a groove or rabbet made in the edge of the hole in the bottom of the bowl. Lugs $r\,r$ are also made, over which notches in the edge of the disk pass in placing the disk.

M is a cover inclosing the space above the frame in which the cutters revolve, and is removably attached by any suitable means.

Having described my invention, I claim—

1. In a meat-cutting machine, the combination, with bowl F and frame A, of the adjustable brackets G G, having rollers $g\,g$, latch-bolts g^2, and springs g^3, substantially as and for the purpose specified.

2. In a meat-cutting machine, the combination, with the shaft B, of the disk C C, comprising a hub, the knives D D, having shanks D^2, the blocks D^3, having stud d^2, and a slot and clamp-bolts d^3, as and for the purpose specified.

3. In a meat-cutting machine, the combination, with the rotative bowl F, having bottom opening and provided with lugs $r\,r$, of the closure R, having notches and inclines by which the said bottom is removably held in place, substantially as and for the purpose specified.

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Witnesses:
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