

J. G. BAKER.

Improvement in Cheese Cutting Machines.

No. 121,314.

Patented Nov. 28, 1871.

Drawing No. 1.

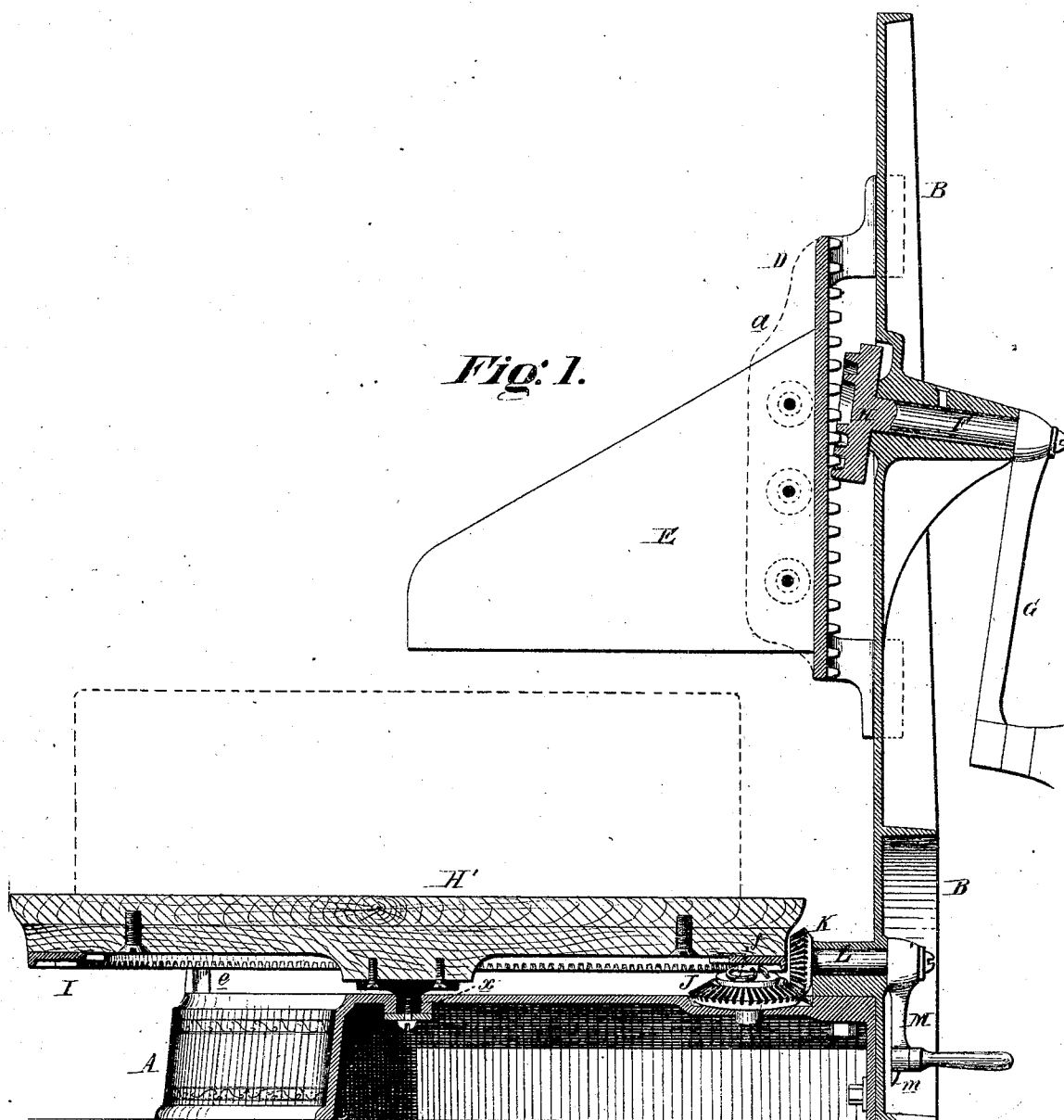


Fig. 1.

Witnesses { *Mr. B. Harding*
John Parker

J. G. Baker
by his Attors
Howson and Son

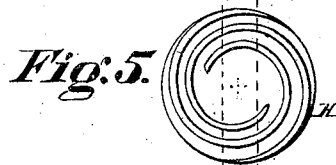
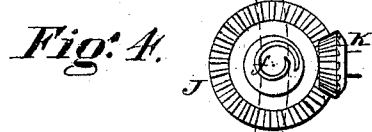
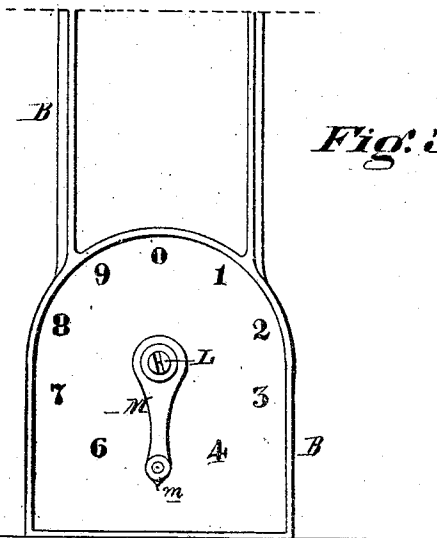
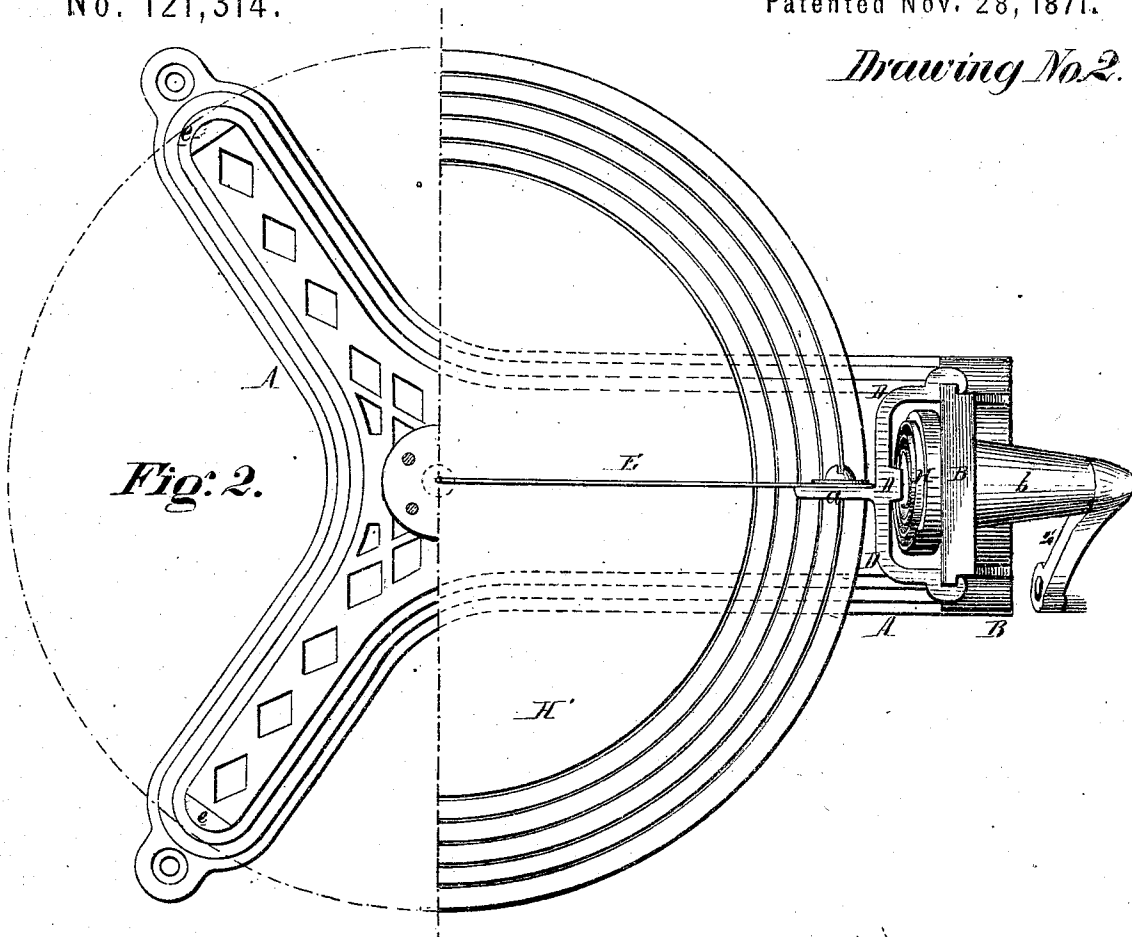
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Drawing No. 2.



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UNITED STATES PATENT OFFICE.

JOHN GULICK BAKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
"ENTERPRISE MANUFACTURING COMPANY OF PENNSYLVANIA."

IMPROVEMENT IN CHEESE-CUTTING MACHINES.

Specification forming part of Letters Patent No. 121,314, dated November 28, 1871.

To all whom it may concern:

Be it known that I, JOHN GULICK BAKER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented an Improved Cheese-Cutting Machine, of which the following is a specification:

My invention consists of a machine, too fully explained hereafter to need preliminary description, whereby slices of any desired weight may be cut from a cheese, the weight of which has been previously ascertained. The object of my invention is to prevent the necessity of resorting to detached make-weight pieces of cheese, which generally accompany slices cut at random in the usual manner.

Figure 1, drawing No. 1, is a vertical section of my improved cheese-cutting machine; Fig. 2, drawing No. 2, a sectional plan, showing half of the bed and half of the base-plate beneath, with the mechanism for operating the bed; Fig. 3, a rear view of the lower part of the machine; and Figs. 4 and 5, detached views of parts of the machine.

A is the base-plate of the machine, and to this base is secured a standard, B, the opposite edges of the latter forming vertical guides for the rack D which carries the blade E, the rack being provided with a flange, *a*, to which the blade is bolted, riveted, or otherwise secured. An inclined shaft, F, is arranged to turn in a projection, *b*, of the standard B, the shaft being furnished at one end with a suitable crank-handle, G, and at the opposite end with a disk, H, on the face of which are two spiral ribs adapted to the teeth of the rack D. Owing to the inclination of this disk the spiral ribs at its lower edge only are in gear with the teeth of the rack, and consequently the rack, with its blade, must be raised or lowered, according to the direction in which the disk is turned by the handle G. This mechanism for operating the blade is an especial feature of my invention, as great power may be imparted to the blade by means of a comparatively short crank-handle through the simple and inexpensive medium of the disk, with its spiral ribs and rack, in place of ordinary gearing, which would be much more bulky, complex, and expensive. H' is a circular table, made, in the present instance, of wood, and provided on the under side with a central pivot, X, turning in the base A, the table bearing on projections *e* on the base-

plate. On the under side of the table is an annular rack, I, into which gears a spiral rib, *f*, on the inclined bevel-wheel J, the spindle of which turns in the base-plate, a bevel pinion, K, being adapted to the bevel-wheel, and the said pinion being secured to a shaft, L, arranged to turn in the standard B, and having a crank-handle, M, with a projection, *m*, so that the said handle will serve as a pointer for the circular graduated index formed on the said standard B, as shown in Fig. 3.

In the present instance the gearing for rotating the table is such that the index-handle M must be revolved three hundred and sixty times to cause one complete revolution of the table; hence, if a cheese sixty pounds in weight has to be cut into slices weighing one pound each, the index-handle must be revolved six times between each descent of the knife; if a slice weighing half a pound be required, then the handle should be revolved but three times between each descent of the knife. These examples will suffice to show that after the weight of a cheese has been determined, slices of any desired weight may be cut from it, in the above machine, if a careful manipulation of the index-handle be observed, and that the detached pieces which usually accompany slices of cheese cut at random in the usual manner may be avoided.

I claim as my invention—

1. The combination of a handle, M, serving also as a pointer, stationary graduated index, and table H', with mechanism for imparting motion from the said handle to the table.

2. The combination of the table and its circular rack with the bevel-wheel J and its spiral rib *f*, bevel pinion K, and crank-shaft L.

3. The guided rack D and its blade E, in combination with the inclined disk H and its spiral rib or ribs.

4. The table H', the position of which may be determined by a pointer and index, substantially in the manner described, in combination with a blade, E, which derives its motion from a source independent of that which actuates the table.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

Witnesses: JOHN GULICK BAKER.

WM. A. STEEL,
JOHN K. RUPERTUS.

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