D. Campbell,

Bread and Meat Cutter,

No. 48,014, Patented May 30, 1865.

Fig. 1.

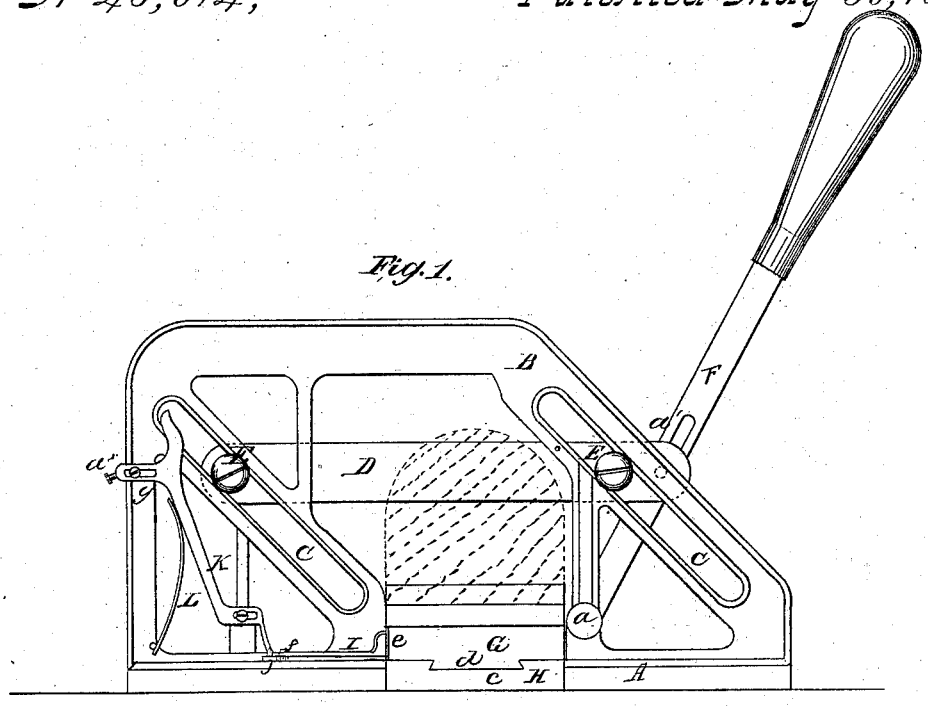
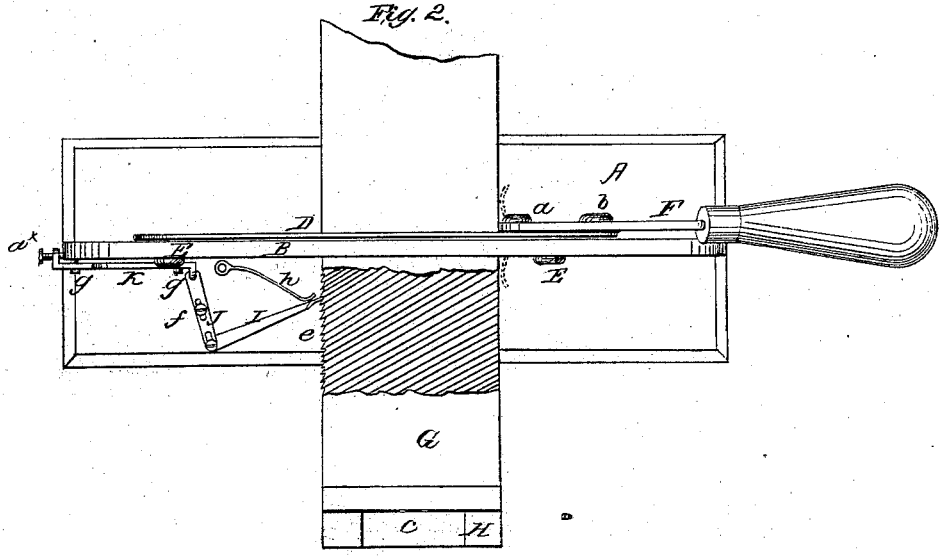


Fig. 2.



UNITED STATES PATENT OFFICE.

DANL. CAMPBELL, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO HENRY SEYMOUR, OF THE CITY OF NEW YORK, N. Y.

IMPROVED CUTTER FOR BREAD, MEAT, &c.

Specification forming part of Letters Patent No. 48,014, dated May 30, 1865.

To all whom it may concern:

Be it known that I, DANIEL CAMPBELL, of Elizabeth, in Essex county and State of New Jersey, have invented a new and Improved Device for Cutting Bread, Meat, and other Substances; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved machine for cutting or slicing bread, meat, and various other substances; and it consists in the employment or use of a straight knife provided with guide-pins which work in oblique parallel grooves, the knife having a lever applied to it, and all arranged to operate as hereinafter set forth, whereby the knife is made to operate or work with a drawing cut, and to work with the greatest facility.

The invention further consists in a novel automatic feed mechanism for feeding the substance to be cut to the knife, as hereinafter described.

A represents a base-plate, on which an upright cast-iron frame, B, is firmly secured. This frame may be an open or skeleton one, in order to obtain lightness, and it is cast with two inclined or parallel oblique slots, C C, which are clearly shown in Fig. 1.

D represents a straight knife, which has two screws, E E, passing into it, one near each end, said screws passing through the slots C C, and in connection with the slots serving as guides for the knife.

F is a lever, the lower end of which works on a pivot, *a*, at the lower part of the frame B. This lever has an oblong slot, *a'*, made in it for a screw, *b*, to pass through into the knife to connect the latter with the former, and admit of a play of the lever, in order to operate the knife.

From the above description it will be seen that by operating the lever F the knife D will be moved up and down obliquely and operate with a drawing cut, so as to work with the greatest facility.

G represents a carriage, on which the substance to be cut is placed. This carriage works in a transverse direction relatively with the frame B, and it rests upon a way, H, provided with a longitudinal groove, *c*, in which a projection, *d*, at the under side of the carriage fits. The carriage G has a rack, *e*, at one side of it, with which a pawl, I, engages, said pawl being pivoted to one end of a lever, J, the fulcrum-pin *f* of which passes into the base-plate A. The opposite end of lever J has the lower end of a slide, K, fitted in it, said slide working on guide-pins *g g* in the frame B, and having a spring, L, bearing against it, said spring having a tendency to press the slide K toward the carriage G. The pawl I has a spring, *h*, bearing against it, which spring has a tendency to keep the pawl engaged with rack *e*.

The upper end of the slide K is acted upon by one of the screws E of the knife D each time the knife arrives at the end of its upward movement, and the slide K is thus made to actuate the lever J and pawl I, the latter giving the feed-movement to the carriage G. The spring L gives the return movement to the slide K. Thus by this simple arrangement a perfect automatic feed movement is given the substance being cut, the carriage on which the latter is placed being moved at each upward stroke of the knife. The length of the movement of the slide K is regulated by a set-screw, $a^{\times}$, and by this means the length of the feed movement of the carriage G may be varied, according to the thickness of slice required. This set-screw, it will be seen, bears against the end of the frame B.

I would remark that a spring may be employed to press against one side of the carriage G, in order to force or press the carriage against the pawl. This spring is shown in red in Fig. 2.

I claim as new and desire to secure by Letters Patent—

1. The application of the knife D to parallel oblique slots C C in a frame, B, in connection with the lever F, attached to the knife and frame B, all arranged to operate substantially as and for the purpose set forth.

2. The slide K, arranged in connection with the knife D, lever J, pawl I, and rack *e* on carriage G, to operate substantially in the manner as and for the purpose herein set forth.

DANIEL CAMPBELL.

Witnesses:
STANLEY G. MASON,
JOHN ROSE.