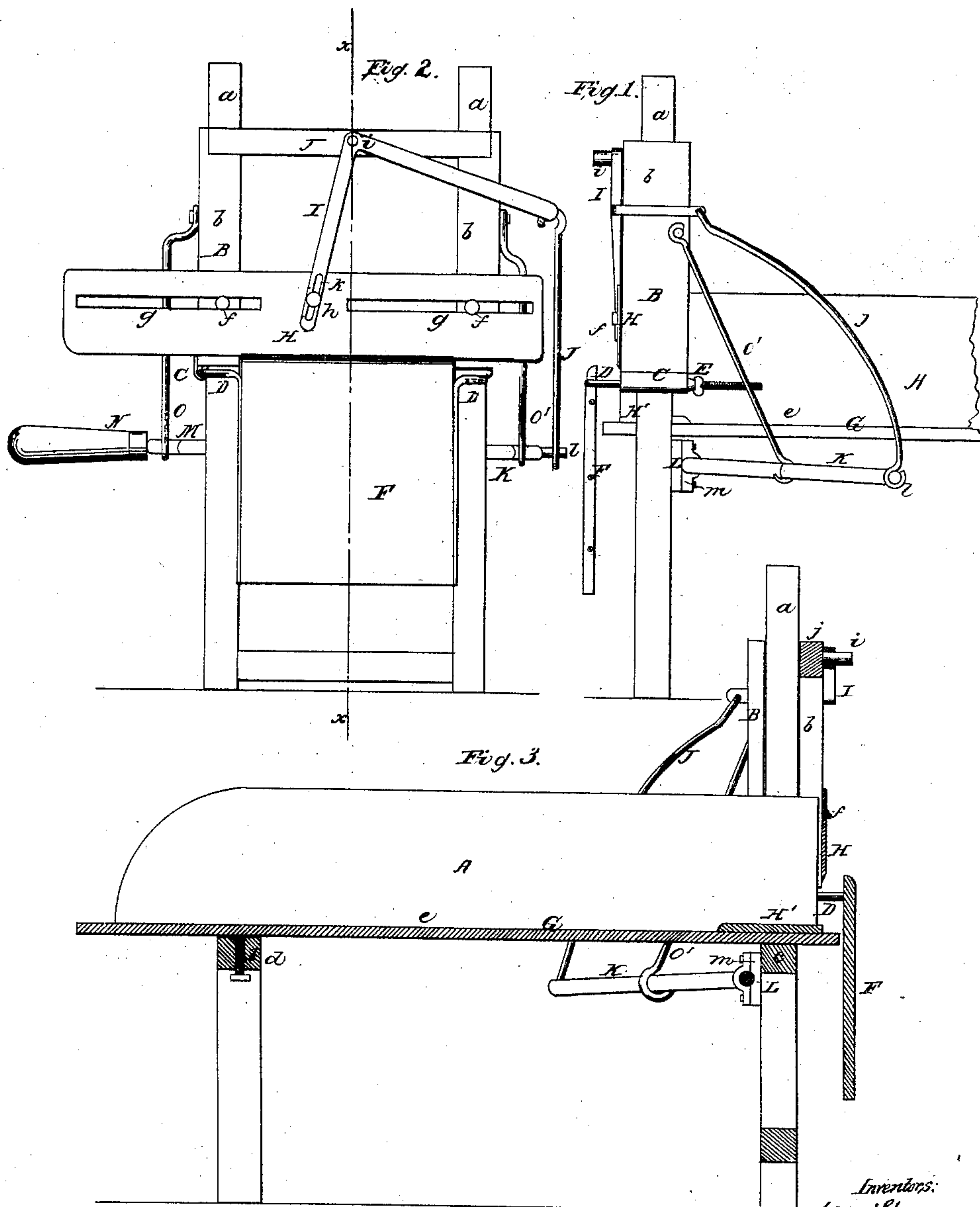


Shaw & Stilwell,

Bread-Cutter,

N^o 46,150,

Patented Jan. 31, 1865.



Witnesses:
Geo. Lusk
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UNITED STATES PATENT OFFICE.

HIRAM M. SHAW AND CHARLES B. STILWELL, OF FREMONT, OHIO.

IMPROVED BREAD AND MEAT SLICER.

Specification forming part of Letters Patent No. 46,150, dated January 31, 1865.

To all whom it may concern:

Be it known that we, HIRAM M. SHAW and CHARLES B. STILWELL, of Fremont, in the county of Sandusky and State of Ohio, have invented a new and Improved Device for Slicing Bread, Meat, Vegetables, &c.; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those 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 our invention; Fig. 2, a front view of the same; Fig. 3, a longitudinal vertical section of the same, taken in the line *xx*, Fig. 2.

Similar letters of reference indicate like parts.

This invention relates to a new and improved implement or device for cutting or slicing bread, dried beef, vegetables, and other articles or substances; and it consists in the employment or use of a rising and falling gate or sash with a gage and knife attached, the latter having, besides the rising and falling movement given it by the gate, a reciprocating movement, the gage being adjustable, and all arranged in relation with a feed-box in such a manner that by the turning of a shaft continuously in one direction the article or substance within the feed-box will be cut or sliced expeditiously, and with but a moderate expenditure of power.

A represents a feed box, which may be of rectangular form, open at the top and ends, and supported at a suitable height by legs or any proper framing. The front legs of the feed-box extend upward some distance above it to form guides *aa* for a rectangular sash or gate, B, the sides *bb* of which are grooved vertically at their inner surfaces to receive the guides *aa*. The lower end of each side *b* of the sash or gate B has an eye or bearing, C, attached to it, in each of which a rod, D, is fitted, the upper parts of the latter, which are fitted in said eyes or bearings, having a horizontal position, with a screw-thread cut on their rear ends to receive thumb nuts E. The front parts of the rods D D are curved for a short distance toward each other, and are then bent downward in a vertical direction, and

have a board, F, secured between them, said board performing the function of a gage, as hereinafter described.

G represents the bottom of the feed-box A. This bottom is adjustable, and its front end is fitted under a fixed metal plate, H', which is at the front end and lower part of the feed-box, said bottom resting on a cross-bar, *c*, which is framed into the front legs of the device. The bottom G, near its rear part, rests on a cross-bar, *d*, which is framed into the rear legs of the device, or rather it rests upon a vertical screw, I, which passes through said cross-bar *d* and presses the bottom against the under surfaces of the sides *e* of the feed-box, and prevents the bottom from casually moving.

H represents a horizontal knife, which is attached to the gate or sash B by means of screws *ff*, the latter passing through horizontal slots *gg* in the knife H, which slots are of sufficient length to admit of the desired degree of lateral movement or play of the knife. (See Fig. 2.) This knife is near the lower end of the sash or gate B, and it is allowed to work freely on the screws *ff*. It is connected by a screw, *h*, to the lower end of a bent or right-angular lever, I, the fulcrum-pin *i* of which passes into the center of the top piece, *j*, of the sash or gate B. The screw *h* passes through an oblong slot, *k*, in the lower part of the lever I into the knife, as shown in Fig. 1, and the upper part of said lever at its outer end is bent around or backward by the side of the sash or gate, and is connected by a rod, J, to a pin or wrist, *l*, at the outer end of a crank, K, which is at one end of a shaft, L, the bearings *m* of the latter being attached to the front legs of the device underneath the feed-box A. The opposite end of the shaft L is provided with a crank, M, having two wrists, on the lower one of which a handle, N, is fitted for turning the shaft, the other wrist being connected by a rod, O, to one side of the sash or gate B, a similar rod, O', connecting the opposite side of the sash or gate with a wrist on crank K.

From the above description it will be seen that as the shaft L is turned a rising and falling movement will be given the sash or gate B and knife H through the medium of the rods O O' and cranks K M, and a horizontal reciprocating

ing movement at the same time communicated to the knife H, through the medium of the lever I, rod J, and crank K. The knife H therefore operates with a drawing cut, and performs its work with facility, said knife, when near the termination of its downward movement, passing close to the edge of plate H'. The gage F rises and falls with the sash or gate B, and determines the thickness of the slices to be cut from the article or substance in the feed-box, the operator shoving said article or substance against the gage each time the knife passes above the substance in the upward movement of the sash or gate. The thickness of the slices may be graduated by adjusting the gage F through the medium of the thumb-nuts E.

The bottom G of the feed-box is adjusted so that its front end will serve as a bearing for the gage, to prevent the latter being pushed backward, the bottom being adjusted each time the gage is adjusted.

Thus by this simple arrangement we obtain a rising and falling knife having a reciprocating movement or drawing cut, and also obtain an adjustable gage for graduating the thickness of the slices into which the article or sub-

stance is to be cut, and the knife operated by a continuous rotary movement of a shaft.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The knife H, attached to a sash or gate, B, having a rising and falling movement communicated to it by cranks and connecting-rods or their equivalents, and the knife having an automatic reciprocating movement communicated to it from the sash or gate through the medium of the lever I and rod J, from the crank or driving shaft, substantially as and for the purpose set forth.

2. The adjustable gage F, attached to the sash or gate B, substantially as shown, when used in combination with the knife H, and all arranged to operate substantially as and for the purpose specified.

3. The adjustable bottom G, in combination with the gage F and knife H, all arranged to operate as and for the purpose set forth.

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Witnesses:

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