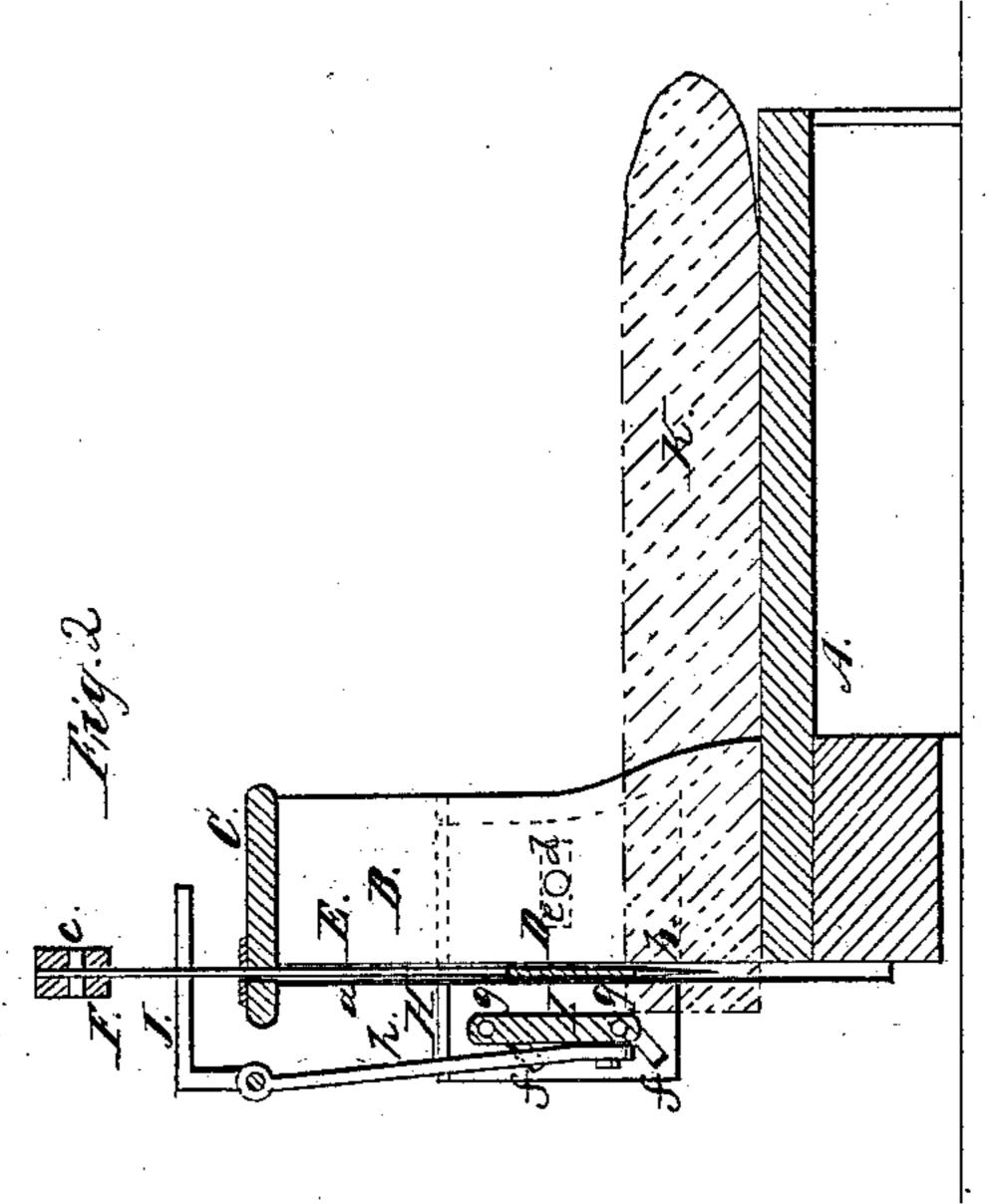
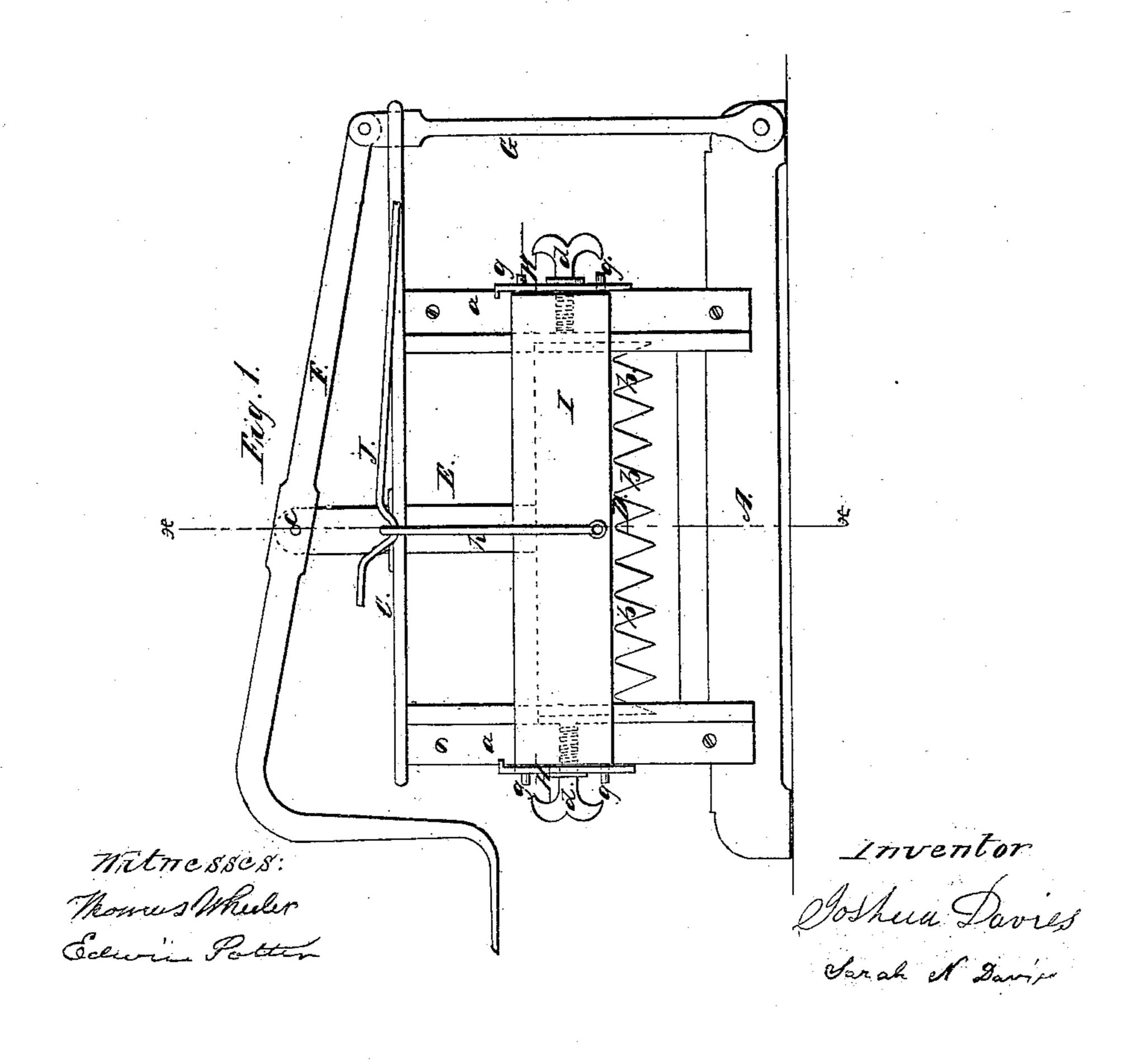
## J. S. J. M. Milles,

## Bread Cutter,

125,633,

Fatentea Oct.4, 1859.





## UNITED STATES PATENT OFFICE.

JOSHUA DAVIES AND S. N. DAVIES, OF MUSKEGON, MICHIGAN.

## BREAD AND VEGETABLE SLICER.

Specification of Letters Patent No. 25,633, dated October 4, 1859.

To all whom it may concern:

Be it known that we, Joshua Davies and SARAH N. DAVIES, both of Muskegon, in the county of Muskegon and State of Michigan, 5 have invented a new and Improved Device for Cutting or Slicing Bread, Vegetables, &c.; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed 10 drawings, making a part of this specification, in which—

Figure 1, is a front view of our invention. Fig. 2, is a side sectional view of the same,

taken in the line x, x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts in the two figures.

To enable those skilled in the art to fully understand and construct our invention we

will proceed to describe it.

A, represents a horizontal bed or platform, at each side of which at its front end of which are connected by a traverse bar C. To the front surface of each upright B, a 25 plate a, is attached. These plates form guides for a knife D, the plates being so swaged as to form, when secured to the uprights, vertical grooves or recesses to receive the ends of the knife D, which are allowed 30 to move freely up and down in the grooves or recesses. The knife D, is formed of a steel plate and its cutting edge is composed of a series of V-shaped teeth b, as shown clearly in Fig. 1, the teeth having their cutting 35 edges formed by basils at both sides of the plate. The knife D, has a bar or arm E, attached at right angles to its upper edge near its center. This bar or arm E, passes through the traverse bar C, of the uprights

4.0 B, and is attached by a pivot c, to a hand lever F, one end of which is pivoted to an upright support G, whose lower end is pivoted to the front end of the platform A. To the outer side of each upright B, a

45 plate H, is attached by a set screw d. The set screws pass into the uprights through horizontal oblong slots e, in the plates and therefore admit of the plates H, being adjusted laterally. This will be understood 50 by referring to Fig. 2, in which the slot and a set screw of one plate are shown by dotted lines. In each plate H, two curved slots f, f, are made, one above the other. The

form of these slots is shown clearly in Fig. 2, the upper portion of them being vertical 55

and the lower portion inclined.

I, is a gage in each end of which two pins g, are driven, and these pins fit in the slots f, of the plates H. The gage I, is simply a 60 rectangular plate or board and has such a position as to extend about the distance of its height below the knife D, when the latter is fully elevated. To the gage I, a rod h, is attached. This rod extends upward 65 and is attached to a spring J, which is secured to the traverse bar C.

The operation is as follows:—The bread or other substance K, to be sliced is placed on the platform A, the knife D, elevated and 70 the front end of K, shoved in contact with the gage I, which determines the thickness of the slices. The knife D, is then forced down through K, by depressing the lever F. Just previous to the knife D, reaching the 75 an upright B, is attached, the upper ends | end of its downward stroke, the lever F, strikes the spring J, and the gage I, is slightly depressed vertically and then outward owing to the form of the slots f. This movement of the gage I, allows the slice to 80 fall by its own gravity and discharge itself freely from the device. The vertical position of the slots prevents a casual outward movement of the gage when the bread or other substance to be cut is adjusted against 85 it at the termination of each upward movement of the knife. The spring J, elevates the gage as the hand lever is raised. The slices may be cut of any thickness by adjusting the plates H, so that the gage I, may 90 be set at a distance from the knife corresponding to the desired thickness of the slices.

> One of the prominent advantages of our method of arranging the gage I, is that it 95 remains in place until the slice is almost entirely cut, before it moves to allow of the escape of the slice. This peculiar movement of the gage is due to the employment of the oblique slots f, in the adjustable plates H, in 100 which the supporting pins g, of the gage I move.

> It will be observed that the hand lever, in its descent, does not strike or depress the spring J, until the stroke of the knife is al- 105 most completed and the slice almost cut. The end of the slice is thus supported by the

gage I, till almost severed; and by this support, the slice is prevented from crumbling or curling or falling over so that a better and neater slice is made, the bread when 5 thus sliced presenting a very smooth and

even appearance and without waste.

Another advantage of our improvement is that when spring J, is depressed, the slots being oblique, the gage I, falls by its own 10 gravity, descending outwardly so as to allow space for the slice to pass into any proper receptacle.

In those bread cutting devices that have the gage moved outward by rod and crank, the gage begins to move simultaneously with the knife, so that the slice has no support in front while being cut, but is deprived thereof the moment the knife begins to descend.

We do not claim broadly the operation of the gage by connection with the knife, but 20 What we do claim as our invention and

desire to secure by Letters Patent, is—

The arrangement and combination of the adjustable slotted plates H, gage I, rod h, spring J, and lever F, as herein shown and 25 described, so that the slice of bread shall be supported by the gage until the stroke of the knife is almost finished and so that the gage I, shall fall outwardly on the depression of spring J, all as set forth.

JOSHUA DAVIES. SARAH N. DAVIES.

Witnesses:
Thomas Wheeler, Edwin Potter.