(No Model.)

2 Sheets—Sheet 1.

S. L. DENNEY.

BREAD AND MEAT CUTTER.

No. 260,287. Patented June 27, 1882.

Fig. 1

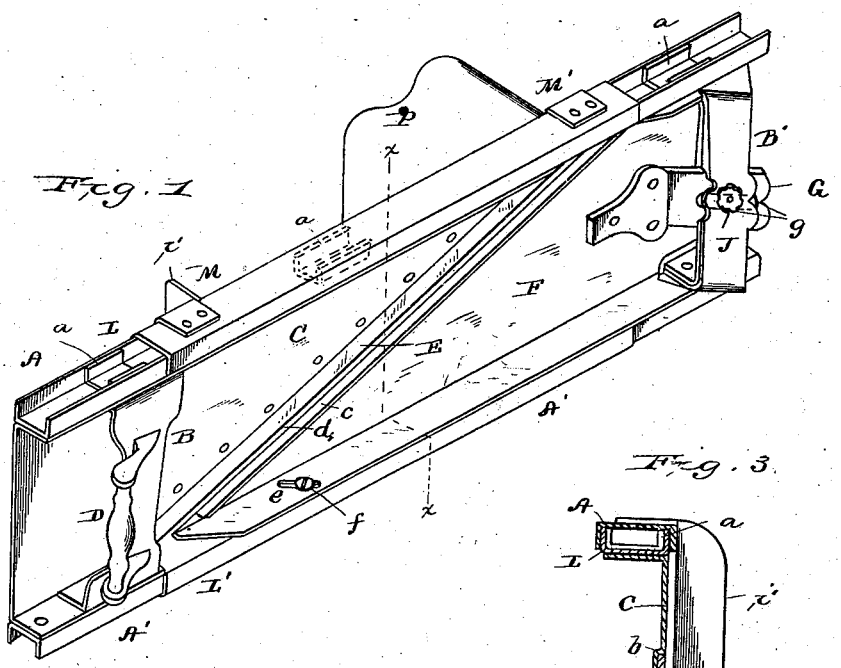


Fig. 3.

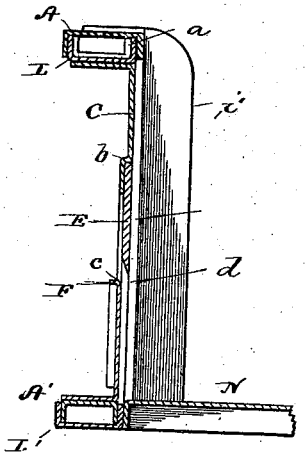
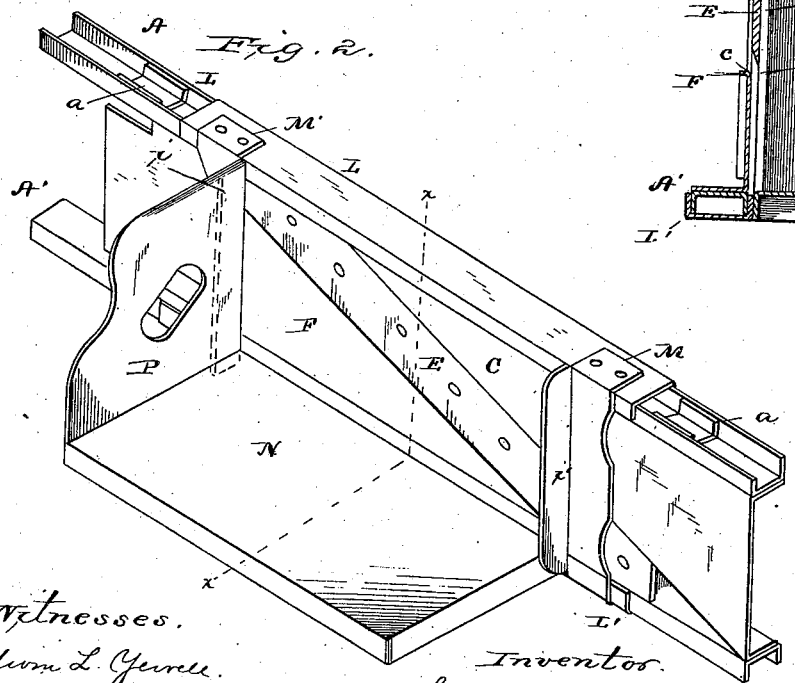


Fig. 2.



Witnesses.
Edwin L. Yewell.
J. J. McCarthy.

Inventor.
Samuel L. Denney.
By E. M. Alexander, Attorney

N. PETERS. Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

S. L. DENNEY.

BREAD AND MEAT CUTTER.

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Fig. 4.

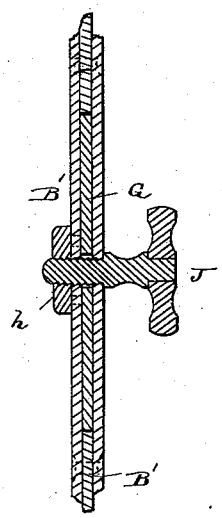


Fig. 5.

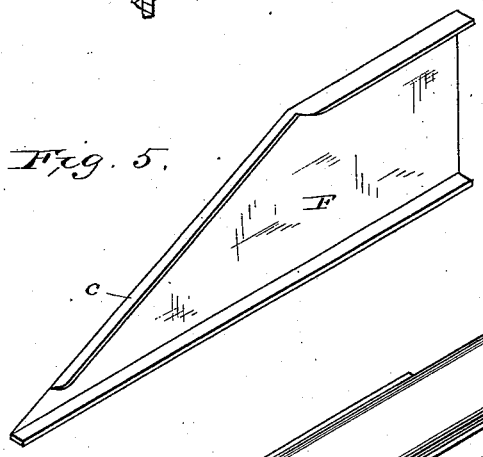
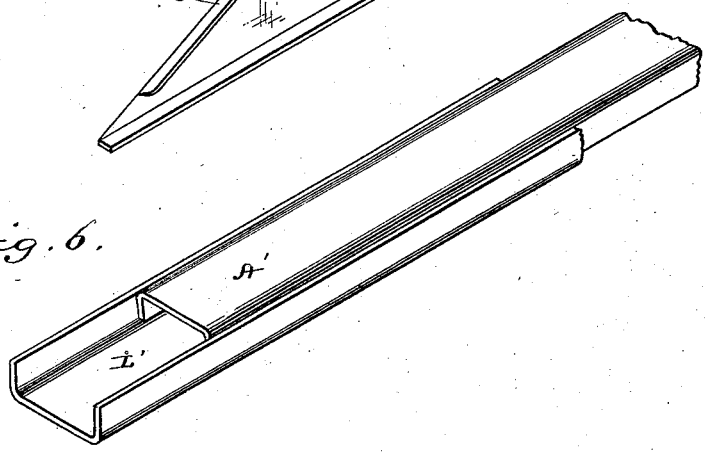


Fig. 6.



Witnesses.
Edwin L. Gerree
J. J. McCarthy.

Inventor.
Samuel L. Denney.
By C. M. Alexander.
Attorney.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL L. DENNEY, OF STRASBURG, ASSIGNOR TO ISRAEL L. LANDIS, OF LANCASTER, PENNSYLVANIA.

BREAD AND MEAT CUTTER.

SPECIFICATION forming part of Letters Patent No. 260,287, dated June 27, 1882.

Application filed May 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL L. DENNEY, of Strasburg, in the county of Lancaster, and in the State of Pennsylvania, have invented certain new and useful Improvements in Bread and Meat Slicers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to improvements on machines which are designed for slicing vegetables and other substances; and my principal object is to dispense with the use of wood and substitute metal which I can galvanize, and thus obviate rusting, and at the same time more firmly and permanently secure the rivets used for uniting the different parts constituting the improved machine.

There are a great many advantages secured by the use of metal alone in the construction of my slicing-machine, besides the fact that I obviate the rapid wear and the shrinking and swelling which are incident to the use of wood and metal. These advantages will appear from the following description, when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of one side of my improved metal slicer. Fig. 2 is a perspective view of the opposite side of the slicer. Fig. 3 is a section taken transversely through the machine in the vertical plane indicated by dotted line *x x* on Figs. 1 and 2. Fig. 4 is a vertical section through the devices for adjusting the gage-plate and fixing the same for different thicknesses of slices to be cut by the diagonal knife. Fig. 5 is a perspective view of the gage-plate detached from its channeled guides. Fig. 6 is a perspective view in detail of portions of the channeled guide and slide.

Similar letters of reference indicate corresponding parts in the several figures.

In the annexed drawings, A A′ designate two parallel slides, which may be made of any desired length and which are made of wrought-metal right-angular channel-pieces rigidly secured together at a suitable distance apart by angular end pieces, B B′, and by the flanged edges of the knife-bearing plate C, which latter is rigidly riveted to said slides. The upper channeled iron slide, A, has three brackets or bearers, *a*, inserted in it, one at each end and the other in the middle, which afford durable supports for the weight of the knife-frame. The angular ends of the end piece B are firmly riveted to the top and bottom slides and to the flanges of the knife-bearing plate C, and to this end piece, B, I secure the handle D, which is grasped by the hand to give the reciprocating movement to the knife that is secured to the bearing-plate C.

The knife E is a straight blade, which is arranged in a diagonal position with respect to the parallel slides A A′, and which is fitted into a depression made by pressing an offset, *b*, in the diagonal edge of the bearing-plate C, so that when the knife is secured in a suitable manner in said depression its outer surface will lie flush with the corresponding surface of the plate C, as shown in Fig. 3. A smooth or even surface will thus be presented to the substances being sliced, and greater rigidity will be given to said plate C.

F designates an angular-flanged guard-plate, the object of which is to regulate the thickness of the substance being sliced, when adjusted by means hereinafter explained. This guard or gage plate F is constructed with top and bottom flanges, and also with a narrow angular flange on its diagonal edge *c*, which adds great strength and rigidity to this thin plate F, especially at the diagonal edge *c*, where the greatest amount of resistance is required to overcome the pressure of the slices while being cut and passing through the throat *d* of the slicer.

The guard or gage plate F is adjustable bodily and laterally between the slides A A′, and near its acute end an oblique slot, *e*, is made through its bottom flange, through which a pin, *f*, passes that enters the bottom slide, A′.

The guard or gage plate F is so light as compared to a wooden guard, and free from the friction incident to wood, that I am able to employ a very simple device to adjust this plate for varying the size of the throat *d* according

to the thickness of the slices to be cut. This adjusting device is made as follows: G designates a broad obtuse angular plate, one part of which is riveted to the broad end of the guard or gage plate F, and the other part is horizontally slotted, as indicated at *g*. The slotted part of the plate or bracket G passes through and is guided by the end piece, B′, which is set at an angle to the vertical plane of the plate F.

By means of a clamping-screw, J, which passes through the piece B′ and slot *g*, and is tapped into a nut, *h*, fixed to B′, the plate or bracket G′ can be loosened from the piece B′ and the guard or gage plate adjusted as required, after which the latter can be held rigid by tightening the screw J.

L L′ designate two channeled iron guides, in which work the slides A A′. These guides are connected together rigidly by means of flanged pieces M M′, that are firmly riveted to the guides, as shown, and constructed with vertical right-angular wings *i i′*, that afford strength and stiffness to said pieces M M′. N designates a horizontal table, formed of a sheet-metal plate, which is flanged to afford side and end supports, and which is rigidly riveted to one of the flanges of the bottom guide, L′, and to the wings *i i′* of the pieces M M′. This table, which is flush with the top of the bottom slide, A′, is designed for supporting the substance while being sliced, and it is constructed with a vertical bearing-plate, P, which is secured in any convenient manner to the vertical wing *i* of the flanged or tie piece M′, as shown in the drawings.

One of the advantages of my machine is that its parts are all exceedingly light, and at the same time possess great strength and durability combined with cheapness.

The entire machine can be galvanized, which will have the effect of soldering all of the rivets permanently and uniting the riveted parts rigidly, also preventing rust.

Another advantage is that the knife-bearing plate is so thin when compared with a similar plate made of wood that there is no lodgment for sticky articles, and I am able to sharpen the knife with a thin whetstone or a steel without detaching it from its bearing-plate.

Having described my invention, I claim—

1. In a slicing-machine of the character described, the combination of the parallel channeled iron slides, bearing the slicing-knife and the guard or gage plate, with the channeled iron guides and means for securing them together, substantially as described.

2. In a slicing-machine, the combination of channeled iron slides working in metal guides of a corresponding shape, the knife-bearing plate riveted to the slides, the end ties and supports B B′, also riveted to said slides, the adjustable metal guard or gage, and a clamping device for adjusting and holding this gage, substantially as described.

3. The knife-bearing plate having a knife secured into a depression formed in the diagonal edge of this plate by bending the sheet metal, substantially in the manner and for the purposes described.

4. The guard or gage plate F, having flanges formed on its upper and lower edges, in combination with a flange formed on its diagonal edge, and in combination with a slicing-machine constructed substantially as described.

5. The combination of the channeled iron slides, the channeled iron guides fitted therein, the flanged pieces M M′, riveted to said guides, and a metal table, N, flanged and riveted to the bottom guide and to the two wings formed on said pieces M M′, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 19th day of April, 1882.

SAMUEL L. DENNEY.

Witnesses:
JOSEPH SAMSON,
ISRAEL L. LANDIS.