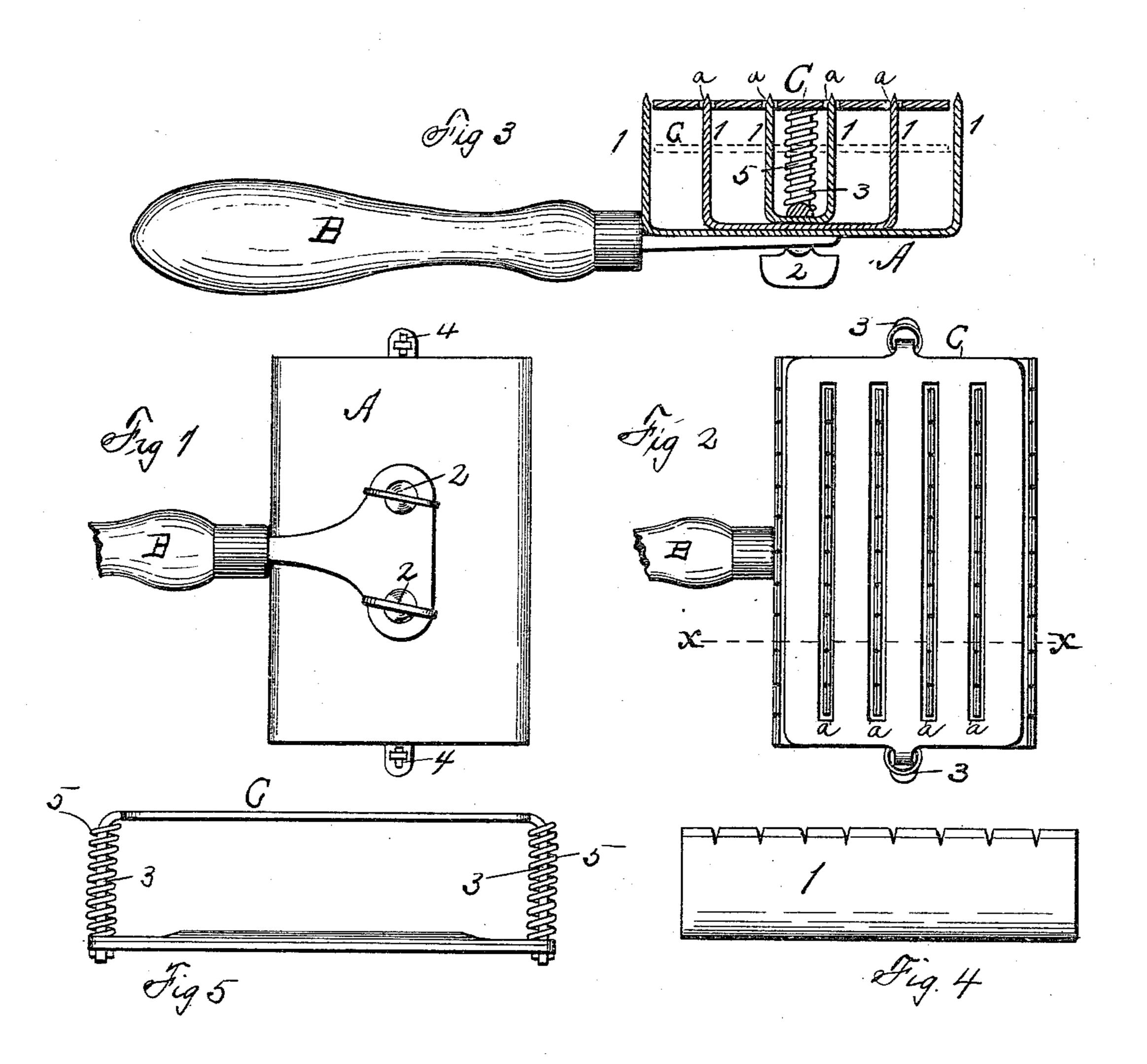
(No Model.)

2 Sheets-Sheet 1.

## I. T. WILLIAMS. STEAK TENDERER.

No. 457,551.

Patented Aug. 11, 1891.



Witnesses C. V. Macst Ho, about,

Dsaac I. Milliams Inventor
By his attorneys

Ameth rodemson

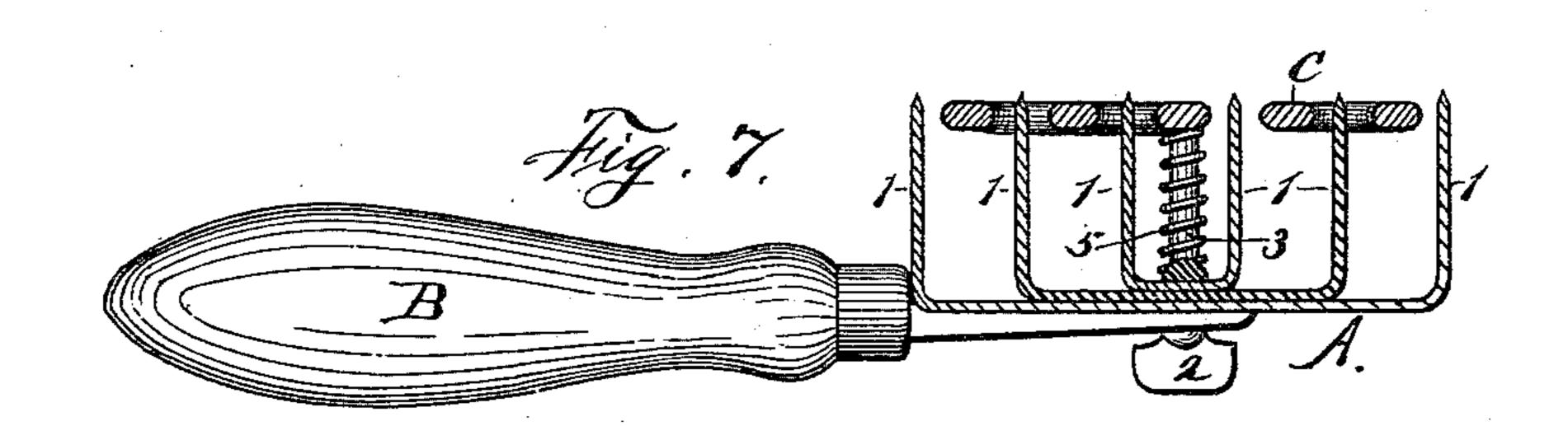
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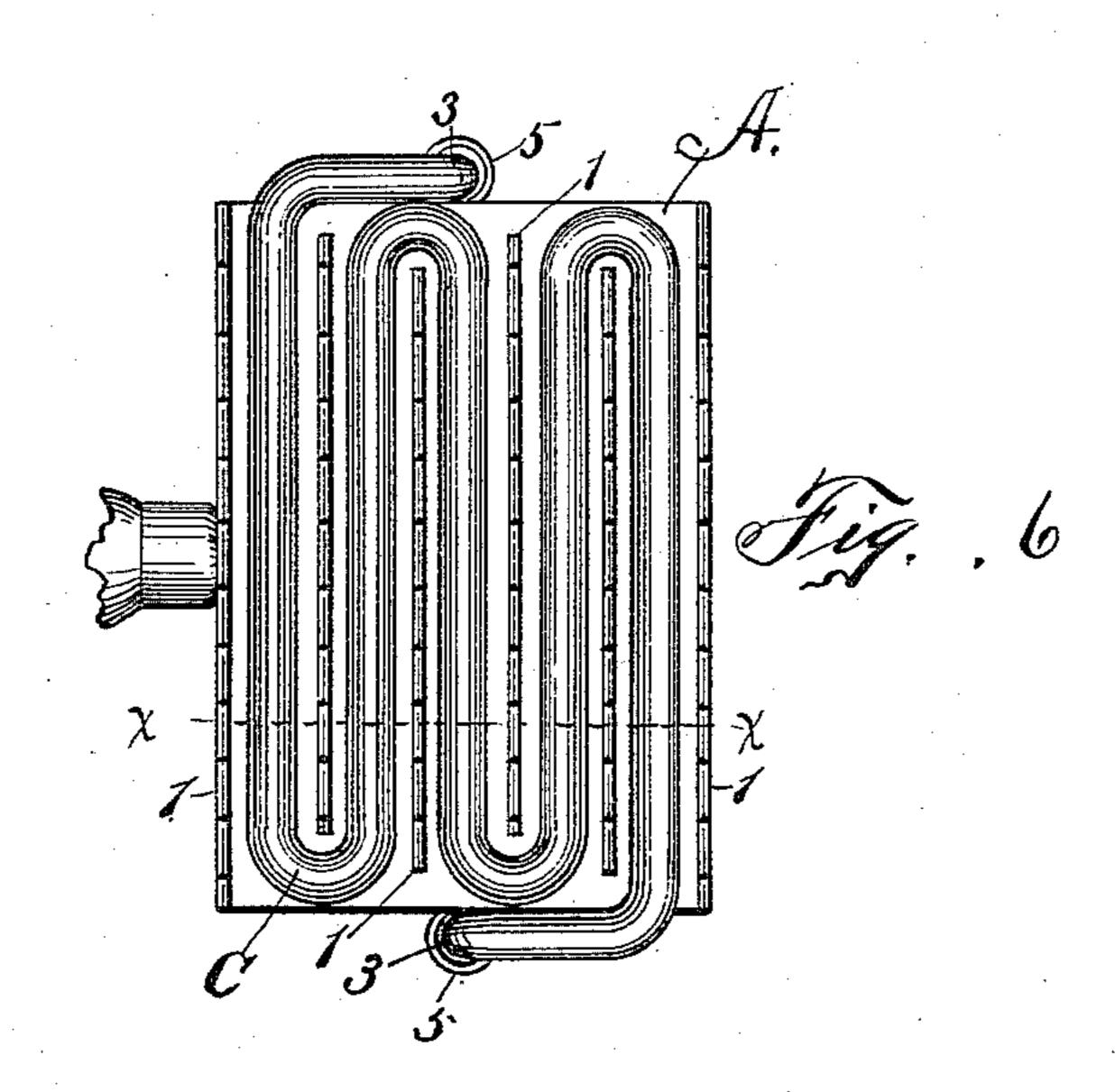
2 Sheets-Sheet 2.

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## United States Patent Office.

ISAAC T. WILLIAMS, OF SYRACUSE, NEW YORK, ASSIGNOR OF ONE-HALF TO MOSES A. SHUMWAY, OF SAME PLACE.

## STEAK-TENDERER.

SPECIFICATION forming part of Letters Patent No. 457,551, dated August 11, 1891.

Application filed November 3, 1890. Serial No. 370, 212. (No model.)

To all whom it may concern:

Be it known that I, ISAAC T. WILLIAMS, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Steak-Tenderers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to masticators or de-10 vices for making meats, such as steaks, &c.,

tender.

My object is to produce such device by means of a series of notches or serrated knives mounted upon a suitable base for handling the same and provided with attachments for automatically cleaning the points of the knives.

My invention consists in the several novel features of construction and operation here20 inafter described, and which are specifically set forth in the claims hereto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in

which—

Figure 1 is a top plan view of the masticator complete. Fig. 2 is a bottom plan view thereof. Fig. 3 is an end section thereof on line X X, Fig. 2, showing the position of the cleaning-plate in dotted lines when in use. Fig. 4 is a side view of one of the knives detached. Fig. 5 is a side view of the cleaning-plate, operating-springs, and back detached. Fig. 6 is a bottom plan view of the cleaning-plate constructed from a continuous piece of wire. Fig. 7 is a transverse section on line X X, Fig. 6.

Similar letters and figures of reference in-

dicate corresponding parts.

The masticator is composed of knives preferably constructed from plates of metal bent in U shape, as shown in Figs. 2 and 3 of the drawings; but I do not limit myself to this form of construction, and it is very evident that knives can be secured to a common base without departing from the spirit of my invention.

1 1 are the knives and preferably run parallel to each other, all secured to a common base A in any ordinary manner.

o 2 is a thumb-screw securing the handle to the base of the knives, as shown.

C is a cleaning-plate provided with slotways a, through which the points of the knives pass, the said plate being supported by standards on either side 33, which pass 55 through the openings 4 4 from the base of the knives, and are secured therein on their outer ends by pins or nuts, as may be desired. 5 5 are coil-springs surrounding these standards, producing a tension to force the 60 cleaning-plate out flush or practically flush with the points of the knives, as shown in Fig. 3. It will be observed that when a blow is struck the knives will enter the meat, the upper surface of which will force back the 65 plate C to a position shown in dotted lines in Fig. 3. Then when the device is again raised for another blow the plate will return to its original position, throwing off anything which may have clung to the knives, always keeping 70 the points of the knives free and ready for use.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. The herein-described meat-tenderer, consisting of multiple **U**-shaped plates secured together centrally at their base and to a handle, said plates having their outer ends sharpened, forming knives, and a cleaning-plate mounted upon and supported by standards, 80 a coil-spring encircling said standards between the plate and base of the knives, as set forth.

2. The herein-described meat-tenderer, consisting of multiple **U**-shaped plates secured 85 together centrally at their base and to a handle, said plates having their outer ends sharpened and notched, creating knives, a cleaning-plate and supporting-standards all constructed from a continuous piece of wire, a 90 coil-spring encircling the said standards between the plate and base of the knives, and means for preventing the free ends of the standards from becoming disengaged with the base of the knives, as set forth.

In witness whereof I have hereunto set my hand this 17th day of October, 1890.

ISAAC T. WILLIAMS.

In presence of— H. P. Denison, E. V. Mack.