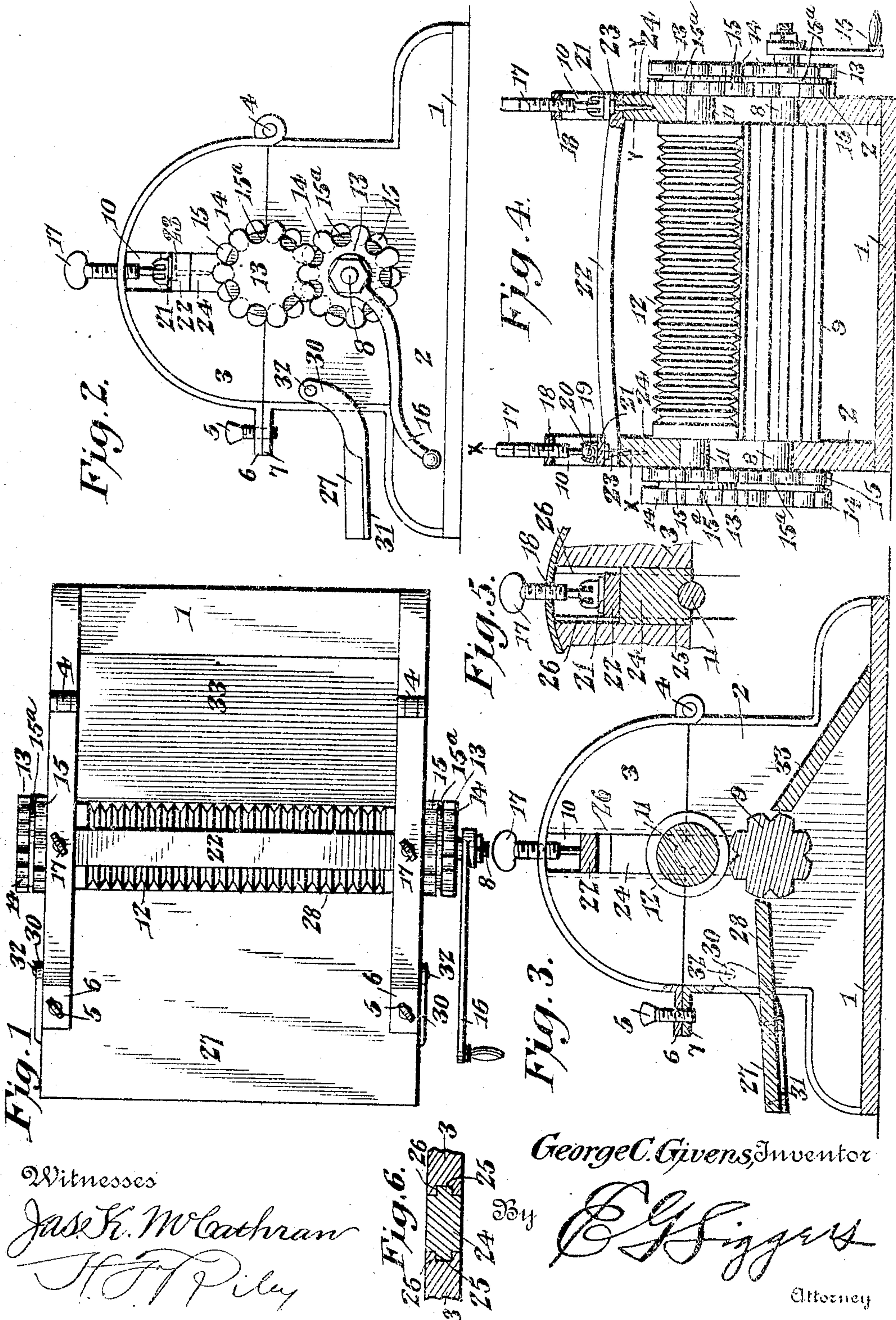


916,145.

Patented Mar. 23, 1909.



Witnesses  
Jas. K. McLaughlin  
H. J. Piley

Fig. 6. 26  
25 24 23

George C. Givens, Inventor  
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# UNITED STATES PATENT OFFICE.

GEORGE C. GIVENS, OF PEA RIDGE, ARKANSAS, ASSIGNOR OF ONE-FOURTH TO J. P. BROWN,  
OF ROGERS, ARKANSAS.

## BEEFSTEAK-TENDERER.

No. 916,145.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed August 15, 1907. Serial No. 388,692.

*To all whom it may concern:*

Be it known that I, GEORGE C. GIVENS, a citizen of the United States, residing at Pea Ridge, in the county of Benton and State of Arkansas, have invented a new and useful Beefsteak-Tenderer, of which the following is a specification.

The invention relates to improvements in beef steak tenderers.

10 The object of the present invention is to improve the construction of beef steak tenderers, and to provide a simple and comparatively inexpensive one adapted to be easily operated and capable of breaking the fibers  
15 or tendons of meat to tender the same, and of being easily cleaned after use.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully  
20 described, illustrated in the accompanying drawing, and pointed out in the claim hereto appended.

In the drawing: Figure 1 is a plan view of a beef steak tenderer constructed in accordance with this invention. Fig. 2 is a side  
25 elevation of the same. Fig. 3 is a longitudinal sectional view. Fig. 4 is a transverse sectional view. Fig. 5 is an enlarged detail sectional view taken substantially on the line  
30 X—X of Fig. 4. Fig. 6 is a detail sectional view taken substantially on the line y—y of Fig. 4.

Like numerals of reference designate corresponding parts in all the figures of the  
35 drawing.

The frame of the beef steak tenderer, which may be constructed of either metal or a combination of wood and metal, embodies a horizontal base 1, and vertical sides 2,  
40 rigid with and extending upwardly from the base at the opposite side edges thereof. The sides 2 are provided with hinged upper sections 3 connected at the rear edges of the sides with the lower rigid sections by suitable  
45 hinges 4, and detachably secured at the front by means of screws 5, which engage forwardly projecting ears 6 and 7 of the upper and lower sections of the sides as clearly illustrated in Figs. 2 and 3 of the drawing.

50 The upper and lower sections of the sides of the frame are provided at their edges with metallic marginal strips or bars. The contiguous terminals of the bars are provided at the rear edges of the sides with eyes to form  
55 the said hinges 4, and they are extended at

the front edges of the sides to form the said lugs 6 and 7. The lower sections of the sides are provided with opposite bearings for the journals 8 of a lower roll 9, and the upper sections 3 are provided with vertical  
60 slots or openings 10 for the journals 11 of the upper roll 12. The lower roll is provided with longitudinal grooves and ribs, and the upper roll is corrugated to form annular grooves or ribs as clearly illustrated in Fig. 65  
4 of the drawing. These rolls are adapted to crush the meat and break the fibers or tendons, and they thereby render the tough portions of meat tender.

The journals of the upper and lower rolls  
70 are equipped with gears 13, each provided with two sets of teeth 14 and 15, the inner teeth 15 being arranged opposite the intervals between the outer teeth, and connected with the same by a central annular web 15".  
75 The teeth are rounded and owing to their double alternate arrangement a positive rotary movement of both the upper and lower rolls is secured when the said rolls are spaced at different distances apart. One of the  
80 journals of the lower roll is provided with a crank handle 16, by means of which the device is operated. The desired pressure is applied to the rolls by means of adjusting screws 17, mounted in threaded perforations 18 of  
85 the metallic marginal strips or bars of the upper sections 3 of the sides, and extending downwardly into the slots 10 from the upper ends thereof, and provided at their lower  
90 ends with balls 19. The balls 19 are arranged in sockets 20 of plates 21, which engage the terminals of a transverse bar 22, and the latter is secured by suitable fastening devices 23 to a pair of bearing blocks 24. The  
95 bearing blocks 24, which engage the journals of the upper roll operate in the slots 10, and they are provided at their side edges with longitudinal ribs 25, which are arranged in grooves 26 of the walls of the slots 10 where-  
100 by the said bearing blocks are interlocked with the upper sections 3 of the sides of the frame. The plates 21 are connected with the screws by the said sockets 20, and are carried upward with the screws when the latter are raised.

105 The meat tenderer is provided at the front of the frame with a table 27, arranged at a slight inclination and having a reduced inner portion 28, which extends to within a short distance of the lower roll. The sides of the



table extend laterally beyond the reduced inner portion and are provided with upwardly extending arms 30, having attached flanges 31, which extend beneath and are secured to the lower face of the table. The shoulders formed by reducing the inner portion 28, engage the lower sections of the sides, and cooperate with the arms to rigidly support the table in position for use. The upper ends of the arms are secured to the outer faces of the lower sections of the sides of the table by suitable fastening devices 32 forming pivots and permitting the outer portion of the table to be swung upward.

15 The meat tenderer is provided in rear of the rolls with an inclined plate or member 33 extending downwardly from the lower roll and adapted to prevent the meat from wrapping around the same. The fixed plate or member 33, which extends across the space between the sides of the frame is rigidly connected with the latter. The meat is placed upon the table, and is fed between the rolls, and is delivered upon the inclined plate or

25 member.

Having thus fully described my invention, what I claim as new and desire to secure by Letters-Patent is:

A beef steak tenderer comprising a frame embodying a base, and opposite sides provided with vertical slots and having separable upper and lower sections, metallic bars secured to the side edges of the sections and provided with hinge joints at the rear edges of the sides and extended at the front of the same to form pairs of projecting lugs, means for detachably securing the lugs together, bearing blocks engaging the upper roll, a bar connecting the bearing blocks, and adjusting screws piercing the metallic bars of the upper sections of the sides of the frame and arranged to force the connecting bar downward, and gearing connecting the rolls.

30 35 40 45

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE C. GIVENS.

Witnesses:

A. R. DOESCHER,  
A. R. POTTER.