

E. H. SHORT.

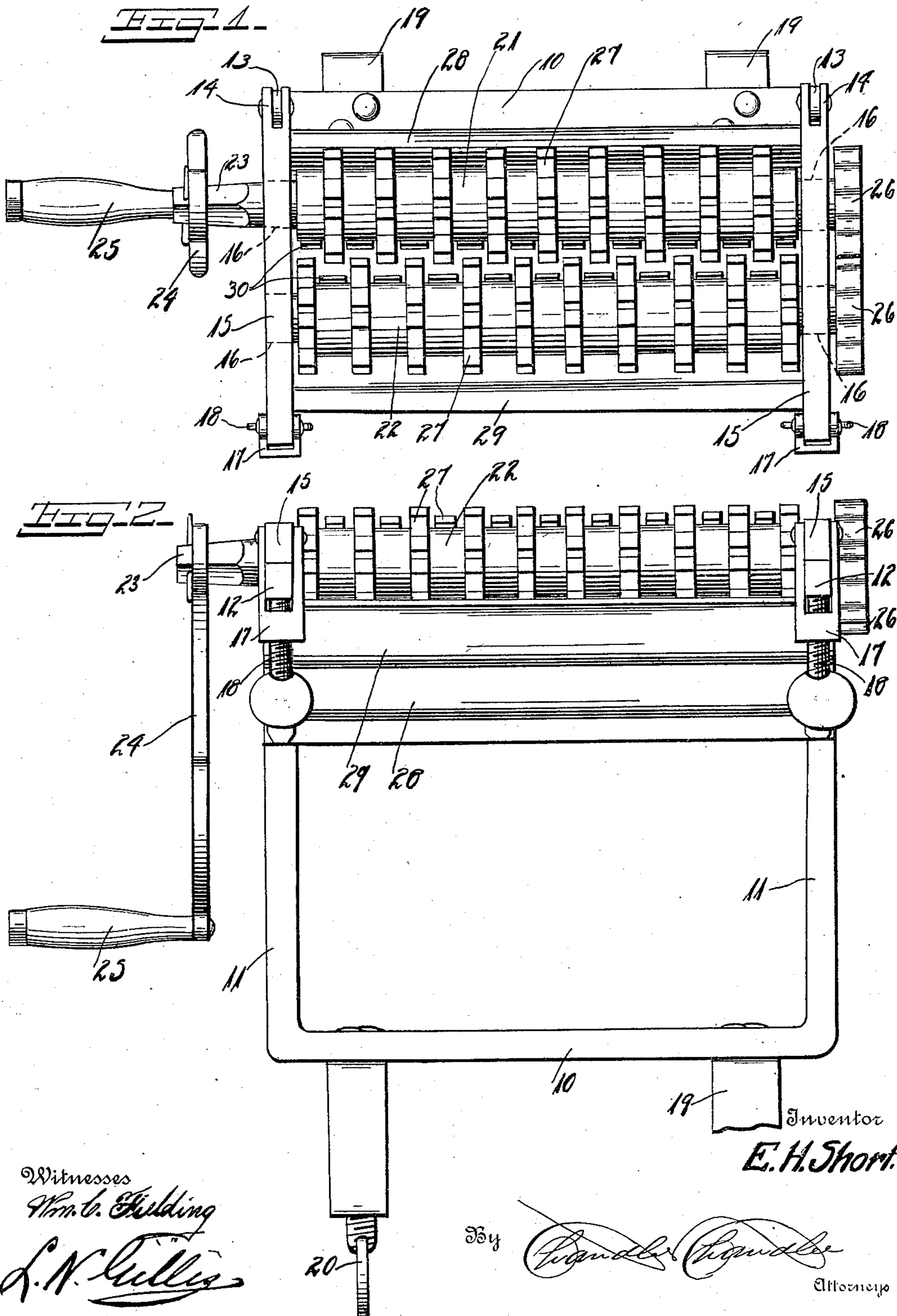
STEAK GRINDER.

APPLICATION FILED AUG. 24, 1910.

996,891.

Patented July 4, 1911.

2 SHEETS—SHEET 1.



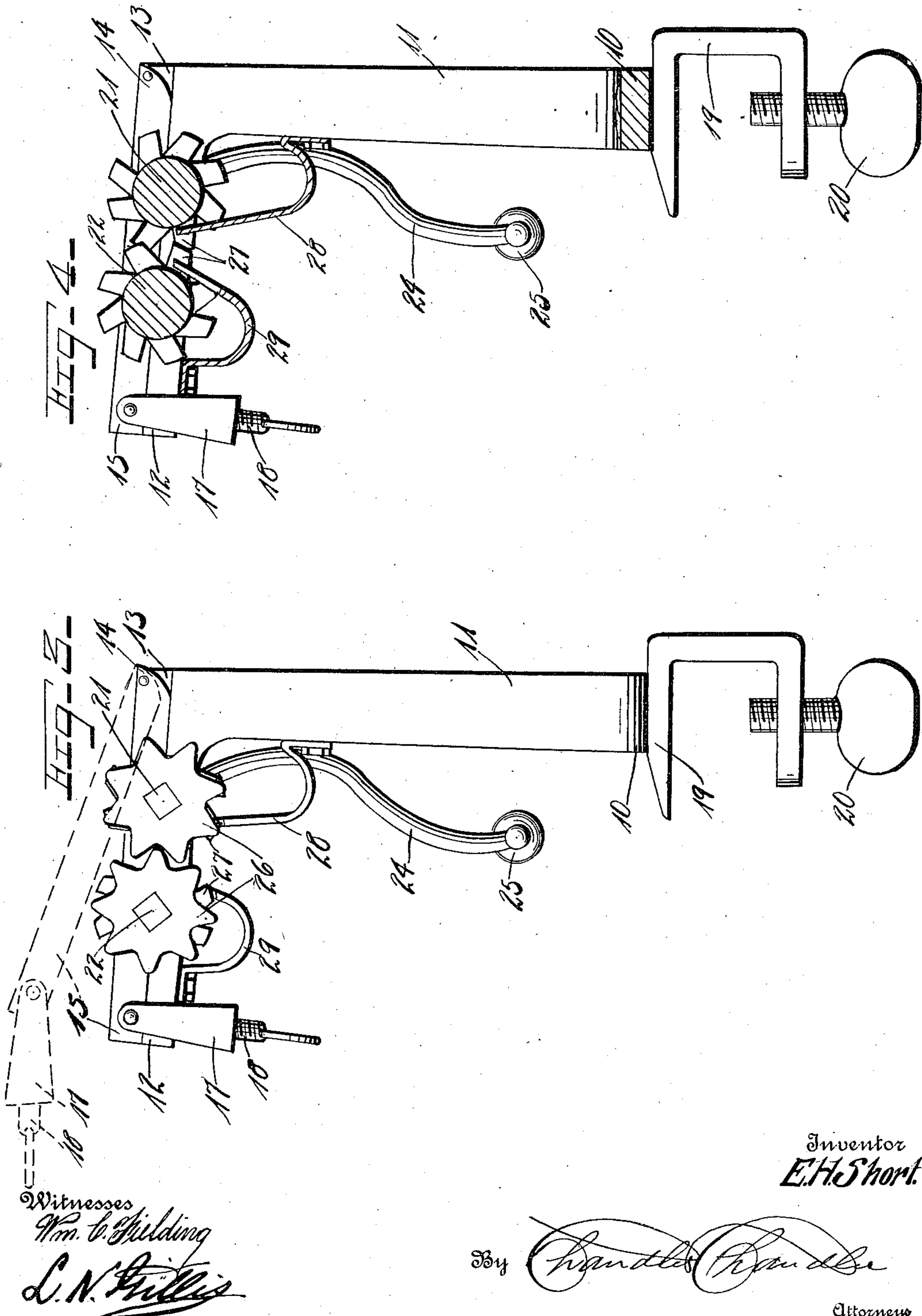
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UNITED STATES PATENT OFFICE.

ENOS H. SHORT, OF WESTON, WEST VIRGINIA.

STEAK-GRINDER.

996,891.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed August 24, 1910. Serial No. 578,639.

To all whom it may concern:

Be it known that I, ENOS H. SHORT, a citizen of the United States, residing at Weston, in the county of Lewis, State of West Virginia, have invented certain new and useful Improvements in Steak-Grinders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to steak grinders and has special reference to a device of this character adapted to macerate a steak without entirely separating the fibers.

The principal object of the invention is to improve the general construction of devices of this character.

Another object of the invention is to provide an improved form and arrangement of crushing rolls for such devices.

A third object of the invention is to provide an improved arrangement of scrapers for the crushing rolls.

The invention consists in certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings, and specifically set forth in the claim.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and:—

Figure 1 is a top plan view of a crusher constructed in accordance with this invention. Fig. 2 is a front elevation thereof. Fig. 3 is an end view of the crusher. Fig. 4 is a transverse section through the crusher.

The stand for this invention comprises a bar bent to U-shape to provide a base and spaced arms 11. Projecting forwardly from the upper ends of the arms 11 are members 12. At the upper ends of the arms 11 are lugs 13 whereto are pivoted the forked ends 14 of members 15. The members 12 and 15 are provided with suitable opposed bearing heads arranged in aligned pairs as indicated at 16. Pivoted to the free ends of the members 15 are yokes 17 through the bight portions of which pass thumb screws 18, the yokes being so arranged that the bights thereof may be swung beneath the members 12. When in this position the thumb screws may be screwed up and the free ends of the members 15 thus held securely to the front ends of the members 12. This frame is arranged to be supported on

the edge of a table by means of suitable clamps 19 provided with clamping screws 20, these clamps being securely fixed to the base portion 10 of the frame.

Journalled in the bearings 16 are grinding rolls 21 and 22. The end of the roll 21 is extended through the journal as at 23 and on this end is held a crank arm 24 provided with the usual handle 25. The opposite end of each of the rolls 21 and 22 projects beyond the frame and suitable gears 26 are provided on these projecting ends, these gears meshing together so that as one of the rolls is rotated the other will likewise rotate. The bodies of the two rolls 21 and 22 are precisely similar in character and each consists of a central cylindrical portion provided with spaced series of teeth 27. These teeth are all of the same form and each has one flank radial, the other flanks being disposed at an angle to the radial flank. The teeth on the two rolls are so arranged that the radial flanks of the teeth on each roll form the cutting or tearing faces. By means of this peculiar arrangement the teeth may be repeatedly sharpened by grinding the radial flank without destroying the shape of the cutter formed thereby.

The series of teeth on the rolls 21 and 22 overlap each other so that the teeth on one roll work in the spaces between adjacent series of teeth on the other roll and it is to be noted that these spaces are of greater width than said teeth and that the teeth are disposed so that they run intermediate the series of teeth on the other roll.

Below each of the rolls 21 and 22 are trough-like plates 28 and 29 each of which is provided with fingers 30 which project into the spaces between the series of teeth and act as scrapers to remove any particles of meat that may hang upon the cylindrical portions of the rolls or the sides of the teeth. These fingers, while lying very close to the cylindrical portions of the rolls, do not quite touch the same so that any juice which may be expressed during the grinding operation will drop off the rolls into the troughs and may be caught in a suitable dish placed beneath the grinder.

In the operation of the device the meat is fed downward between the rolls while the handle 25 is turned. This will macerate the meat to a sufficient extent to render it capable of being mixed with vegetables and the like to form what is commonly known as

"Hamburg steak" but does not entirely separate the fibers so that the juices are largely retained in the meat and the latter does not dry out during cooking. It is to
5 be observed that when desired the rolls may be removed for the purpose of cleansing the machine.

There has thus been provided a simple and efficient device of the kind described and
10 for the purpose specified.

Having thus described the invention, what is claimed as new, is:—

In a steak crusher, a frame, a pair of rolls journaled in said frame, each of said rolls

having spaced annular series of teeth, a 15 trough carried by said frame beneath each of said rolls, fingers on one edge of each trough and having their ends extending between the series of teeth on the respective roll and terminating in close proximity to 20 the body of said roll.

In testimony whereof, I affix my signature, in presence of two witnesses.

ENOS H. SHORT.

Witnesses:

H. H. SMITH,

A. B. LOSH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."