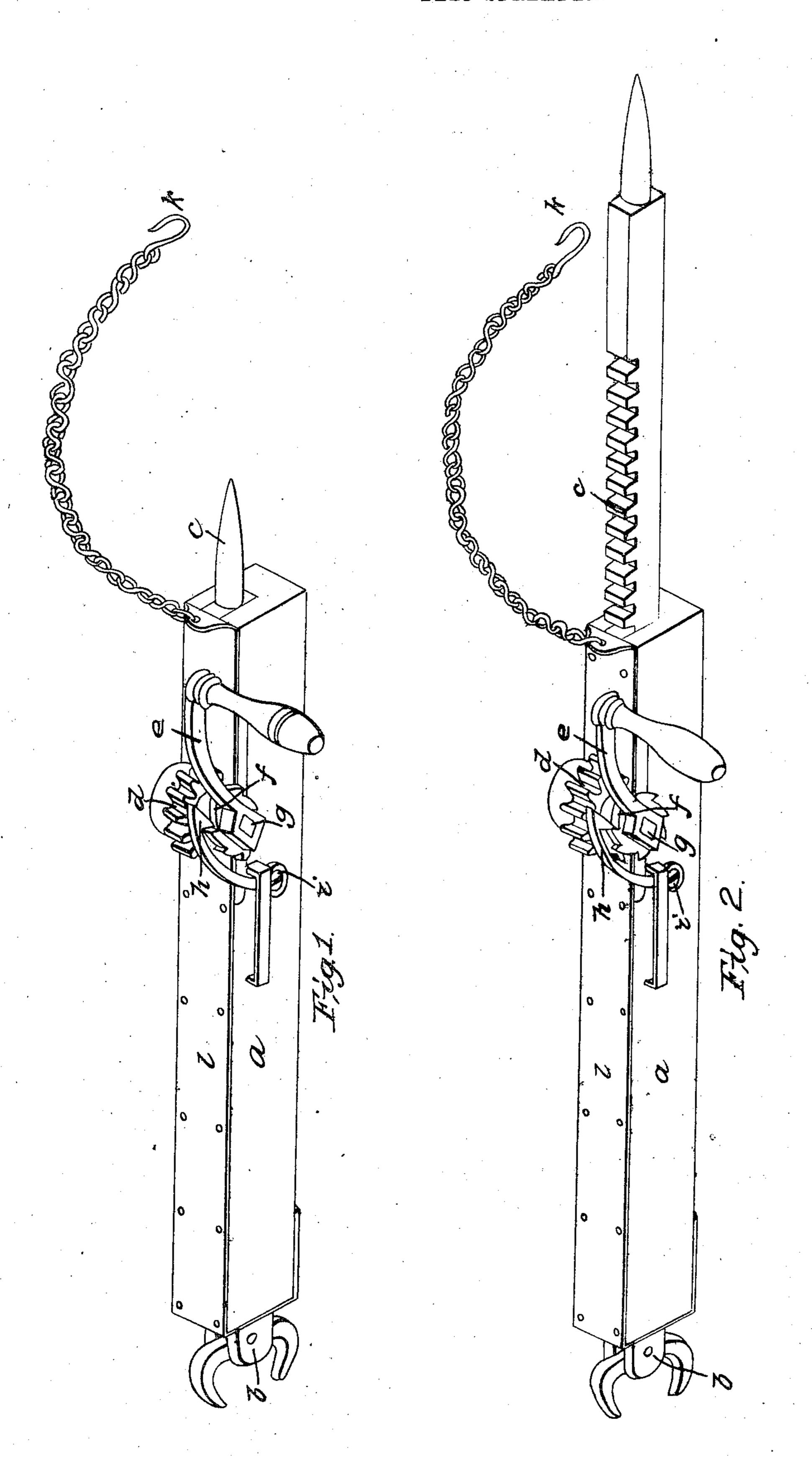
F. TESH.
BEEF SPREADER.



## UNITED STATES PATENT OFFICE.

FREDERICK TESH, OF JOHNSTOWN, PENNSYLVANIA.

## BEEF-SPREADER.

Specification of Letters Patent No. 12,222, dated January 9, 1855.

To all whom it may concern:

Be it known that I, FREDERICK TESH, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new 5 and useful Improvement in Beef-Spreaders; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, forming part of this specification, in **10** which—

Figure 1 is a perspective view of my improved spreader with the tongue drawn back. Fig. 2 is a similar view, with the tongue projecting from its case.

15. In the several figures, like letters of reference are affixed to similar parts of my

"beef spreader."

The "beef spreader" is an instrument used by butchers in cutting up beef, to force 20 asunder the two sides of a beef during the process of chopping through the center of the back bone or spine of the animal which is done along the whole length of the back of the beef, in order to divide it in two equal parts. The "spreader" heretofore used by butchers is a very awkward instrument, and moreover it requires at least two men, and frequently more for its successful operation. It consists of two long poles or levers crossed 30 and united at their intersection by a pin or pivot, the point of intersection of the levers being considerably nearer one end than the other of both levers, so as to give a long and short arm to each lever above and be-35 low the pivot or turning point. To use this "spreader" the points of the short arms of the lever are brought together and inserted (after the spine has been partly severed by the chopper) between the two sides the ends 40 or points resting against the vertebrae of the spine, and the long arms of the levers are pulled asunder until they form nearly a straight line, in which position they are retained by a second pin passed through both 45 levers, to prevent their flying back. To separate these levers and "spread" the beef requires great force and cannot be done by one man, as he could not stretch from the end of one long arm to the end of the other when they approach to their greatest distance asunder. This process has to be repeated more than once in cutting up one beef, in order to give room for the use of the chopper and to keep these parts sufficiently 55 open to separate the back bone in a proper manner, in like manner as a carpenter in

ripping a long board with a hand saw has to use a wedge and move it from time to time as he increases the length of his cut.

My improved spreader is designed to ob- 60 viate these difficulties, and is so well adapted to this object that it can be used by one man alone, and does not need to be removed and replaced during the "spreading" of a beef.

I will now proceed to describe its con-

struction and operation.

In the figures a is a straight and strong stick of oak or other strong wood about two. feet in length. To one extremity of it is 70 attached a fork b, of metal, consisting of two pieces united at the end of the stick aby a pivot, on which they can turn, so as to vary the distance from one point to the other of the fork as may be required.

In the upper face of the stick is cut a longitudinal groove to receive the tongue c. This groove extends from one end of the stick a to within a short distance of the other end at which the fork b is situate. 80 When the tongue lies inside of its groove in the stick a its sharp point projects beyond the end of the stick. On the upper edge of the tongue c is cut a series of teeth composing a ratchet which extends from the 85 butt end of the tongue toward the point to within a distance from the root of the point equal to one third of the length of the tongue or thereabouts. The tongue is made of iron or steel.

Attached to the upper edge of the stick aat a point where the ratchet work on the tongue commences, when it is pushed back into the stick, is a little  $\cos$  wheel d the teeth of which gear into the teeth of the 95 ratchet work on the tongue c. This cog wheel d is turned by a winch or handle e on the end of the spindle which carries the cog wheel d, and between the handles and the cog wheel is a rag wheel f the inner face of 100 which is in the same plane as the side of the stick a. This rag wheel is also carried on the same spindle g which carries the  $\cos$ wheel d and is turned with it by the handle e. A toothed dog h attached to the same side 105 of the stick a as that on which the rag wheel f is situate, turns on a pivot i and when thrown forward gears into the rag wheel f, so as to allow the handle to be turned in one direction to extrude the tongue c from the 110 stick, but prevents it running back when the hand of the operator is removed from

the handle e. The groove in the upper face of the stick a is covered over (excepting where the cog wheel d enters it,) by a plate of iron or other metal, l. A hook k at the 5 end of a chain is attached to one end of the stick a, so that by sticking the hook into the beef in any convenient place, the spreader will not fall to the ground but be suspended

10 beef is completed.

by it when the operation of cutting up the Having thus described the several parts of my "spreader" I will proceed to explain its use and operation. The whole beef is hung up in the usual way previous to its 15 being cut up. When a suitable opening has been made by the operator down the back bone of the animal with the cleaver by severing the spine longitudinally through its center the "spreader" is introduced with the 20 handle toward the operator, the fork b being stuck into the spine, one prong at each end of one of the several vertebrae so as to keep the "spreader" steady and prevent its turning around so that the handle e, may not get 25 out of his reach; the other end of the separator, being the point of the tongue c is rested against the opposite side of the spine of the animal; the tongue of the "spreader" when first introduced being pushed into the 30 groove, which may readily be done by turning back the handle e, when the toothed dog

h is thrown back out of gear with the rag wheel f, as seen in Fig. —. The "spreader" being thus in place, the handle e is turned to force out the tongue c as far as the incision 35 made in the back of the animal will then admit of, and as the operator continues to cut down through the axis of the spine of the beef, he from time to time turns the handle, forcing out the tongue c and spreading 40 apart the sides of the beef wider and wider, the toothed dog h gearing into the rag wheel f and holding the tongue in place and preventing its being forced back into the stick a. The separator being once adjusted on the 45 commencement of the operation needs not to be removed until the operation of cutting down the beef into two parts is completed, as by it the beef can be "spread," as before described, wider and wider during the opera- 50 tion.

Having thus described my improved "beef spreader" what I claim as my invention and desire to secure by Letters Patent is—

The construction of a spreader for beef of 55 a stick a and tongue c operated by a cog wheel and ratchet work, substantially in the manner hereinbefore described.

F. TESH.

Witnesses:

WM. N. HOWARD, W. Ballewell.