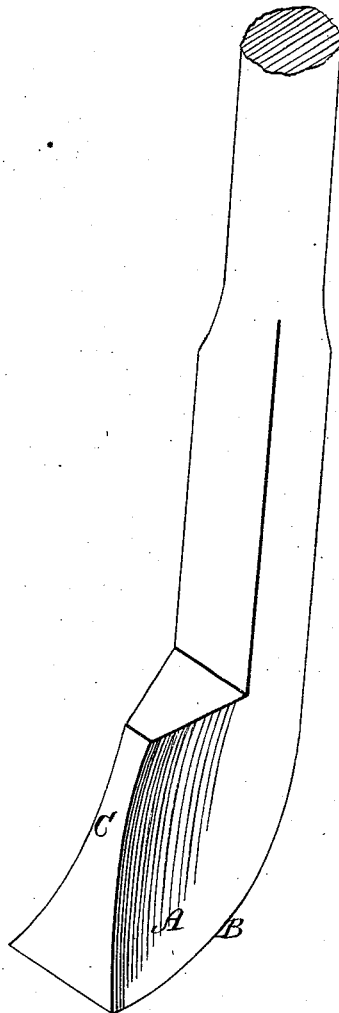


G. W. LEE.

Feed-Cutting Machine Spike.

No. 162,079.

Patented April 13, 1875.



WITNESSES

A. L. Penn

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per
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UNITED STATES PATENT OFFICE.

GEORGE W. LEE, OF HOMEWORTH, OHIO.

IMPROVEMENT IN FEED-CUTTING-MACHINE SPIKES.

Specification forming part of Letters Patent No. **162,079**, dated April 13, 1875; application filed February 15, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. LEE, of Homeworth, in the county of Columbiana and in the State of Ohio, have invented certain new and useful Improvements in Feed-Cutters; and 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.

My invention relates to that class of feed-cutters in which is used a revolving cylinder, with projecting spikes operating between a series of saws; and the nature of my invention consists in the construction of the spikes in the cylinders, as will be hereinafter more fully set forth.

The annexed drawing represents a perspective view of the spike.

In feed-cutters of this class spikes have heretofore been used similar to those in thrashing-cylinders; but I have found that they are defective from the fact that they are thicker toward the cylinder than at the point, whereby they force the fodder through where the saws are the widest, and consequently cause a vibration in the saws from side to side, and finally break them off just where they are inserted in the block.

I now construct my spike so as to widen toward the outer end A, being at this point from three-fourths to seven-eighths of an inch wide,

and to bruise the hard shell of the stalks the face B of the spike is turned back and rounding, so that the extreme ends of the spikes will almost form a circle concentric with the cylinder. The spikes thus constructed will hammer and bruise the coarse shell of the fodder all soft before it passes through between the saws, whereas the old spikes would force it through without bruising, leaving it in chunks, checking the motion of the machine, and causing the vibration and breaking of saws. The back C of my spike is much thinner than the front, and much thinner at the inner end than at the outer end, crushing the fodder finely at the extreme end of the spike, and then passing through nearer the cylinder, where there is more room, doing no injury to the saws by vibration.

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

The spike herein described, having its end A outwardly increasing in width, the front or face B rounded, and the back C made narrower than the front, substantially as shown and described, and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of January, 1875.

GEORGE W. LEE.

Witnesses:

GEO. R. GYGER,
JAMES PILMER.