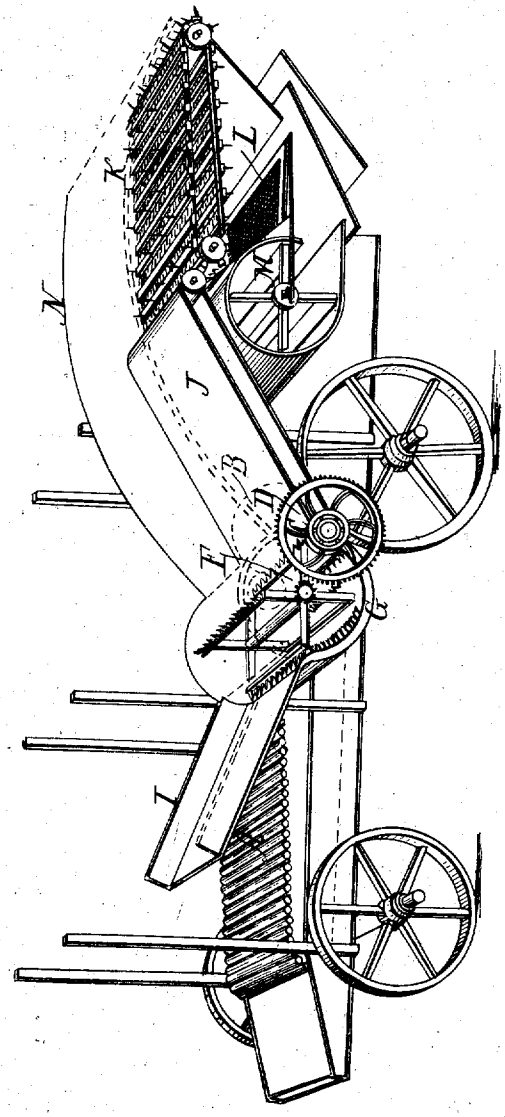
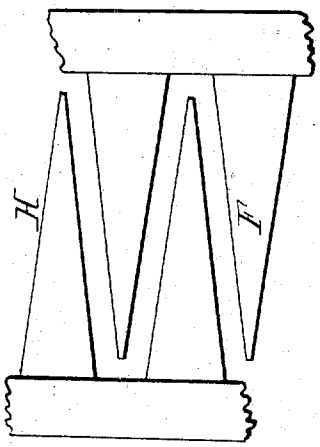
6450X

# S. Lane.

## Thrashing Mach.

Patented Apr. 6, 1831.



Apl 6. 1833 75.

# Samuel Jane
## Letters Patent

6450x

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Samuel Jane himself of his improvements in the machinery for threshing and cleaning wheat and other grain

To all whom it may concern. Be it known that I Samuel Jane have invented certain improvements on the machine for threshing and cleaning wheat and other grains which I denominate the portable horse power threshing and cleaning machine and that the following is a full and exact description of the said machine with my improvements thereon. The power which I employ to drive my threshing machine the endless chain and rail way horse power patented by me on the 17th of May 1830 The mode of doing this and likewise the general structure of the machinery is represented in the accompanying drawings A represents the inclined plane upon which the horse walks B. a cog wheel on the end of the larger drum over which the endless chain passes. This wheel may be 21 inches in diameter and the pinion C. which it drives six inches in diameter the wheel D. may also be twenty one inches in diameter and the pinion E. on the shaft of the beaters six inches. these relative proportions affording a sufficient velocity to the beaters. The beaters have teeth which may be made either of wrought or castiron they are to have on their faces the wedge like pointed form seen at F. The hollow segment G. is best made of cast iron. It is furnished with teeth of the same form and length with those on the beaters. The manner in which the teeth on the top of those on the segment is shown at H. where they are drawn of a suitable size and with the requisite space between them to allow the straw and grain to pass. The teeth I usually make up round of five inches in length or when shorter than this the same generally cannot be threshed clean not having sufficient space &c.

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The pointed or wedge like forms of the teeth, their greater length than in other threshing machines and the space allowed between them for the straw are essential features of my machine, and distinguish it from others which have been made to thresh by means of teeth. The inclined board S. is for the purpose of feeding. The straw and grain after the threshing is completed are received upon an endless apron J. passing over rollers. On this they are carried up to the endless sieve and rake K. This sieve and rake are thus made. Slats of wood the length of the rollers are attached to leather straps or bands passing around the ends of the rollers. These slats are nearly or three inches apart and they have wires projecting from their edges, forming a sieve. From the faces of the slats spikes project which form the rake to lay hold of the straw. The grain and chaff fall through upon a screen L. To this screen a vibratory motion is given from a crank on the shaft of the fan wheel M. or in any other convenient way. The endless sieve and the fan wheel are driven by bands and wheels from the main machine. N.N. is a covering extending over the whole machinery. It is manifest that this threshing machine may be driven by other means than my patented Horse-power, however from this the most convenient. What I claim as my, as my improvements are the particular form and management of the teeth as described and represented, the receiving the grain and straw upon an endless apron and thus carrying it up on the endless sieve and rake. The particular construction of the sieve and rake, and the general arrangement of the machinery, by which these objects are effected

Witness
Hez. S. Jones
J. A. Hall

Samuel Lane

Sd.
Sf.