

# United States Patent Office.

SILAS O. VAUGHAN AND PHINEAS W. VAUGHAN, OF DE KALB, ILLINOIS.

Letters Patent No. 107,985, dated October 4, 1870.

## IMPROVEMENT IN GRINDERS FOR HARVESTER-CUTTERS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that we, SILAS O. VAUGHAN and PHINEAS W. VAUGHAN, of De Kalb, in the county of De Kalb and State of Illinois, have invented a Grinder for Mower and Reaper-Guards; and we do hereby declare that the following is a full and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing and letters marked thereon making a part of this specification, in which—

Figure 1 is a perspective representation of our improved grinder.

Figure 2, a plan view of the stone, rest, &c.

The present invention relates to a grinding-machine which is designed to resharpen the fingers of finger-bars of mowers and reapers; and

Its nature consists in a slotted rest and a traveling pulley-block, for supporting, by means of a chain, the finger-bar, when the fingers are being ground.

In the present state of the art, when fingers become too dull to operate properly in grass or grain, they are replaced with new fingers, at considerable cost. But by my invention they can be resharpened, and thus made to answer the purpose of new fingers.

In fig. 1, N represents a floor or foundation, on which is a frame, L L', supporting the journal I of the grindstone H.

Attached to that part of the frame shown at L' is a projecting block or bed-piece, M, which supports a rest, M'.

This rest is so formed or forked as to pass by the

periphery of the stone H, and onto its convex sides, so that a suitable rest for a finger is provided on both sides of the stone.

E E represent substantial posts, which have a support on the foundation N, and which support a horizontal beam, E', on the top of which is fixed a metal track, B.

A pulley, A, in pulley-block C, travels on the track B, and through the lower part of the block C is put a chain, D, which, by means of hooks, suspends the finger-bar F at such height, as will allow the fingers G to bear on the rest M', as shown in fig. 1.

By this means the inner sides of any finger can be readily brought in contact with the stone, while at the same time the operator is not encumbered with the weight of the finger-bar.

When the fingers on one part of the bar have been sharpened, the bar is moved longitudinally far enough to bring other fingers into position.

The stone H is rotated by means of a band running over a pulley, K.

### *Claim.*

The combination of the forked rest M', frame E E', track B, pulley and block A C, and chain D, arranged to operate as and for the purpose set forth.

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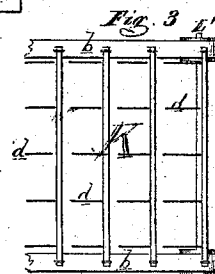
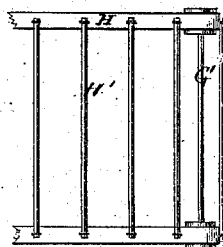
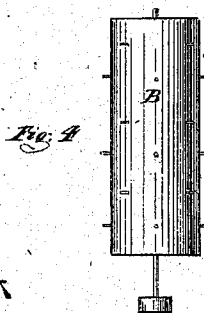
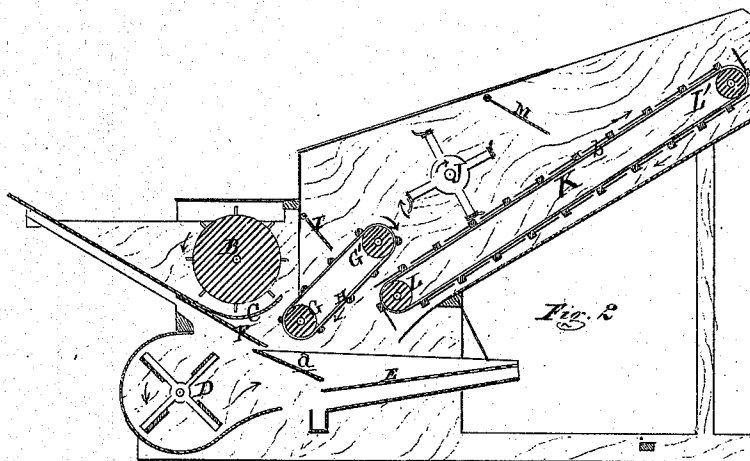
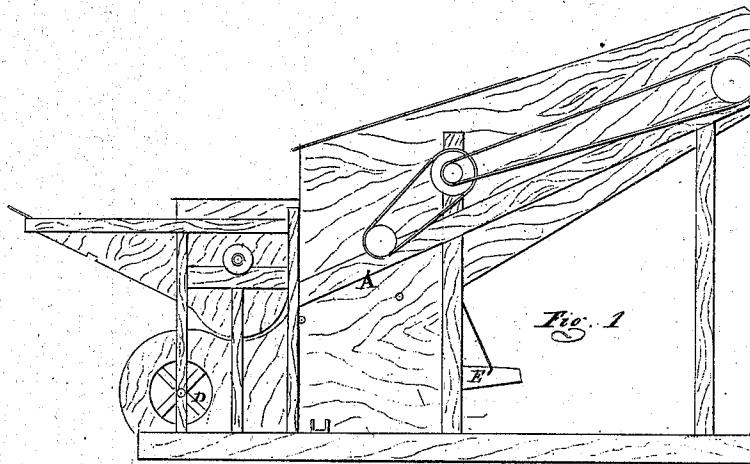
Witnesses:

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Grain Separator.

No. 107,986.

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ATTEST

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Samuel J. Sprague.

Fig. 5

Fig. 6

INVENTOR

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Thos Sprague