

King & Dolph,
Harvester Cutter Grinder.
No. 107,784. Patented Sept. 27, 1870.

Fig. 1.

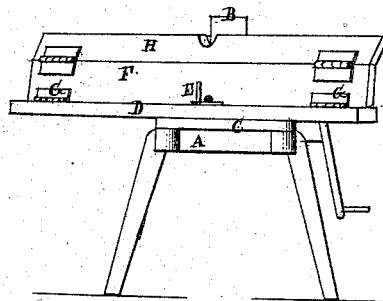


Fig. 2.

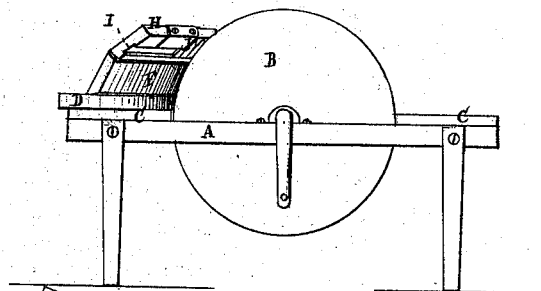


Fig. 3.

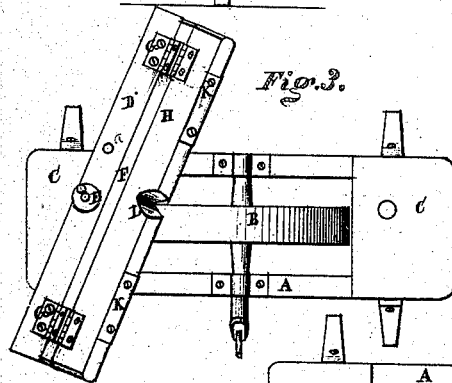
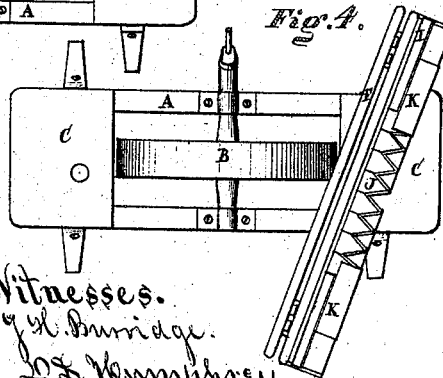


Fig. 4.



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THEODORE E. KING, OF CLEVELAND, AND GEORGE C. DOLPH, OF WEST ANDOVER, OHIO.

Letters Patent No. 107,784, dated September 27, 1870.

IMPROVEMENT IN HARVESTER-CUTTER HOLDERS FOR GRINDERS.

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, THEODORE E. KING, of Cleveland, in the county of Cuyahoga and State of Ohio, and GEORGE C. DOLPH, of West Andover, in the county of Ashtabula and State of Ohio, have invented certain new and useful Improvements in Harvester-Cutter Grinders, of which the following is a full and complete description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a front view.

Figure 2 a side view.

Figures 3 and 4 are top views.

Like letters of reference refer to like parts in the several views.

The nature of this invention relates to a device for holding harvester-cutters while they are being ground, the object thereof being to obtain to the cutters a uniformity in their angular shape, and to the bevel-angle of their cutting-edge, as hereinafter more fully described.

In the drawing, fig. 1—

A is a frame, in which the stone B is hung, and operated in the usual way.

On each end of the frame is a table, C, on which the device for holding the cutters is placed and secured.

Said device consists of a flat piece of timber or bar, D, pivoted to the table, so that it can be turned horizontally more or less in either direction, and which may be secured in any one position by a set-screw, E.

Lengthwise to said bar is hinged a leaf, F, fig. 1, which, by virtue of the hinges *g*, may be vibrated in the direction of the stone.

To the upper edge of said leaf F is hinged, in like manner, a leaf, H, which also may be vibrated in the direction of the stone, independently of the leaf F, or conjointly therewith.

Along the under side of the upper leaf is cut a groove, I, figs. 2 and 4.

The practical operation of the above-described cutter-holder is as follows:

The cutters J are secured to the leaf H, as shown in fig. 4, in which it will be seen that the cutter-bar is slid into the groove I, referred to, and that the ends of the sections or cutters slide under the clamps K, and, thereby, are held from falling from the leaf. The cutters thus secured to the leaf are shown in fig. 4.

In order to bring the edge of a section to the stone, and adjust it at the proper angle, the bar D is turned at an angle to the face of the stone, as shown in fig.

3. This will bring the notch L, seen in the middle of the leaf H, to the corner of the stone. Said notch is of the shape of a section or knife, and through which the edge of the section can be seen and adjusted to the edge of the stone.

This position of the bar and leaves will give the proper bevel-angle to the cutting-edge of the sections, the length of which is applied to the stone by vibrating the leaves F H, which will cause the basil of the section to move lengthwise upon the face of the stone, thereby grinding it to an edge, and each one to the same angle.

The edge of a section, on being ground, the cutter-bar is then moved along until the corresponding edge of another section is brought to the stone, which, in like manner, is ground, and so on until all the edges of one side of the sections are ground.

The position of the bar is then changed from that shown in fig. 2, to that shown in fig. 4. This will bring the opposite edge of each section in the same relation to the stone, so that the edge of the sections may be ground in the same way, and of the same basil, care being taken to adjust the bar at the same angle to the face of the stone in its new position, as it held in its first.

Instead of shifting the bar &c. to the other side of the stone, as described, the same result may be obtained by moving it along upon the table to the hole *a*, making that point the axis of its vibration, which will bring the notch L to the opposite corner of the stone. By this means the face of the stone can be kept straight, as both corners in this way will be worn down equally.

The above-described rest or holder is simple in its construction and operation, and can be easily applied to any ordinary grindstone.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

The herein-described harvester-cutter holder or rest, consisting of the bar D, and leaves F and H, as arranged and operated substantially in the manner as described, and for the purpose set forth.

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