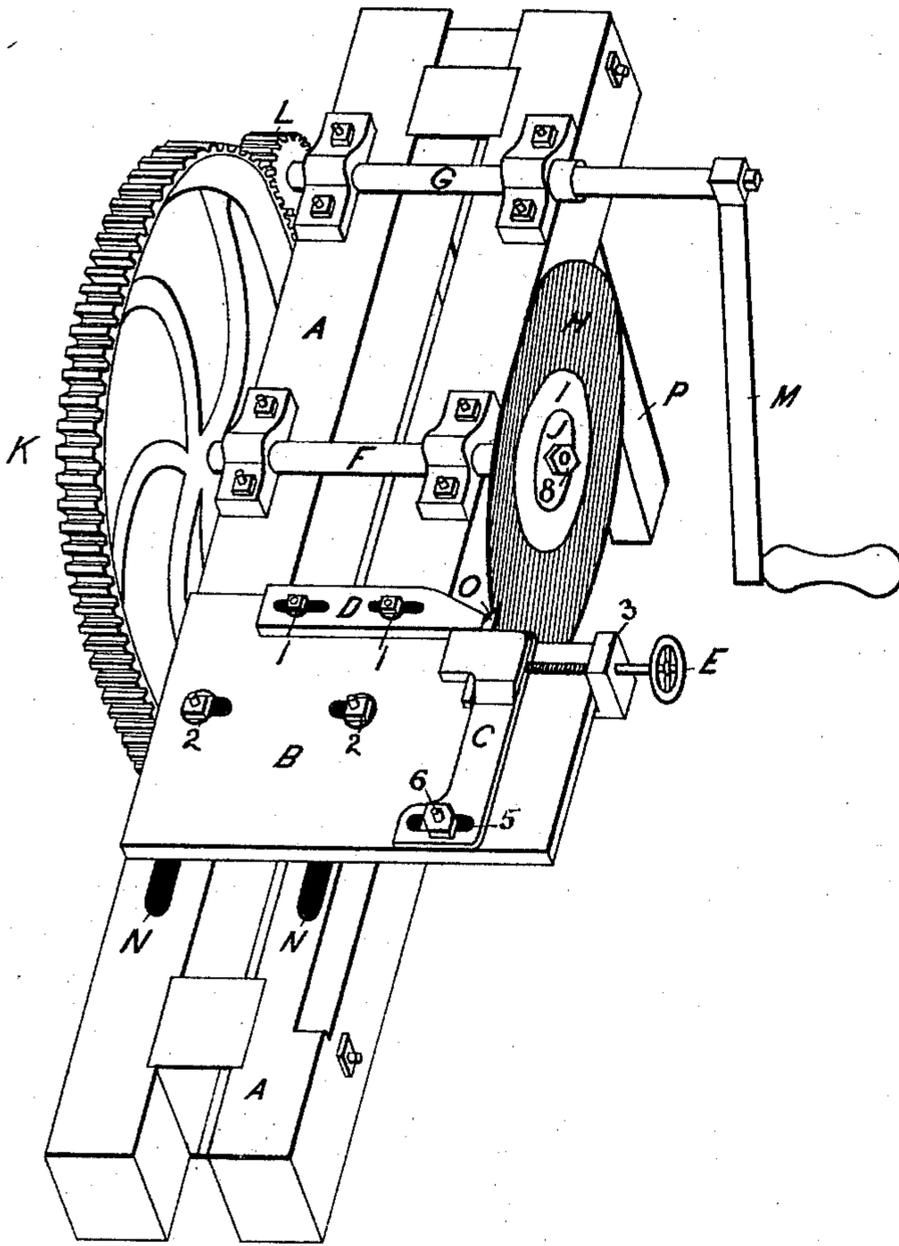


(No Model.)

J. H. EVANS.  
DISK SHARPENER.

No. 544,889.

Patented Aug. 20, 1895.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JOSHUA H. EVANS, OF CALLAWAY, NEBRASKA, ASSIGNOR OF ONE-HALF  
TO JOSEPH E. SAUNDERS, OF SAME PLACE.

## DISK-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 544,889, dated August 20, 1895.

Application filed August 25, 1894. Serial No. 521,293. (No model.)

*To all whom it may concern:*

Be it known that I, JOSHUA H. EVANS, residing at Callaway, in the county of Custer and State of Nebraska, have invented certain useful Improvements in Disk-Sharpener; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification.

This invention has relation to a new and novel improvement in disk-sharpener, the object being to provide a portable device that shall be readily operated and easily adjusted.

The aim of my invention is, more particularly, to provide a sharpener more particularly adapted to be used in connection with disk colters, harrows, and plows.

In the accompanying drawing I have a perspective of a machine embodying my invention.

A represents a suitable supporting-standard of any suitable size and material, which is provided with a transverse main operating-shaft F suitably supported. At one end this shaft is provided with a main driving-gear K, while the other end is threaded and is adapted to receive the retaining-disks I and J, secured to the shaft F by means of a suitable nut. Mounted adjoining the main operating-shaft F is a driving-shaft G, provided with a crank M, which shaft is suitably journaled and is provided with a pinion L, meshing with the gear K. The shaft F is adapted to detachably secure a disk H, which disk can, of course, be flat or dished, and is to be sharpened.

At a suitable point I have secured to the standard A an adjusting-plate B of a suitable size, and adjustably secured to the standard A by means of two set-screws 2, which set-screws are secured to the standard A and pass through suitable openings within the plate B. This plate is further provided with an upwardly-extending shoulder 3, through which an adjusting-screw E is made to pass.

C represents an ordinary tool-holder, which is provided upon the rear with an extending slot 5, within which a set-screw 6 passes, so that this tool-holder C is adjustably and movably secured to the plate B. The adjusting-

screw E is adapted to work against the forward end of this tool-holder C. Within the forward end of this tool-holder I have secured an ordinary sharpening-tool O. Near the forward end this plate B is further provided with two upwardly-extending bolts 1 1, which pass through slots within the guide-bar D. This guide-bar D is also transversely adjustable by means of the bolts 1 1. A disk to be sharpened would simply be secured to the shaft F by means of the retaining-nut 8 and held by the aid of the plates I and J. The tool O would then be adjusted within the holder C to work against the edge of the plate H, which represents an ordinary disk to be sharpened. To prevent this disk H from vibrating and to add stability to the same in sharpening, I provide the guide-arm D, which is intended to snugly work against the face of the disk H, to be sharpened near its peripheral edge. Now, as the device is operated by means of the crank M the disk H is brought in contact with the tool O, which readily and promptly imparts a sharp edge to this disk. A nice adjustment is insured by means of the set-screw E.

Now, having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

In a disk and colter sharpener, the combination with a supporting standard, A, of the transverse operating shaft, F, the main driving gear, K, upon said shaft, the remaining end of said shaft being threaded and adapted to receive the retaining disks, I and J, secured by means of a suitable nut, 8, a shaft, G, provided with the crank, M, said shaft, G, being further provided with the pinion, L, a longitudinally and laterally adjustable plate, B, provided with an upwardly extending shoulder, 3, a set screw, E passing through said shoulder, a pivoted and laterally adjustable tool holder, C, and a laterally adjustable guide bar, D, all substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSHUA H. EVANS.

Witnesses:

GEORGE A. STEELE,  
M. L. SAVAGE.