

G. A. WHITNEY.
Harvester Knife Attachment for Grindstones.
No. 199,674. Patented Jan. 29, 1878.

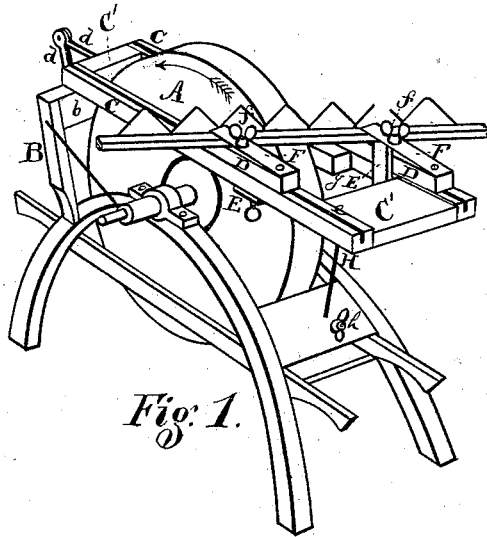


Fig. 1.

Witnesses
B. S. DeForest
A. B. Alley

George A. Whitney, Inventor
Geo. W. Tibbitts, Atty.

UNITED STATES PATENT OFFICE.

GEORGE A. WHITNEY, OF LA GRANGE, OHIO.

IMPROVEMENT IN HARVESTER-KNIFE ATTACHMENTS FOR GRINDSTONES.

Specification forming part of Letters Patent No. 199,674, dated January 29, 1878; application filed September 10, 1877.

To all whom it may concern:

Be it known that I, GEORGE A. WHITNEY, of La Grange, in the county of Lorain and State of Ohio, have invented a new and useful Improvement in Harvester-Knife Grinding Attachment for Grindstones, which improvement is fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a perspective view of a grindstone having my improvement attached.

The object of my invention is to furnish a cheap and convenient device to be attached to the frame of an ordinary grindstone for the purpose of sharpening harvester and reaper knives, constructed, arranged, and operating substantially as hereinafter described and claimed.

In the drawing, A is a grindstone, set in a frame in the well-known manner. The frame shown in the drawing is that of my patent of October 11, 1875. To one end of said frame are secured two upright posts, B B, having a cross-head, *b*. A frame, consisting of two side pieces, C C, and strong end pieces C' C', is used for holding the knife to be ground or sharpened. This frame is attached to the cross-head of the upright posts by means of a hinge, consisting of two rods or bolts, *d d*, pivoted together, one rod or bolt being set in the top of the said cross-head, and the other in the end of the knife-frame, both of which, however, are permitted to turn in each of the frames, thus allowing the knife-frame to be turned in any direction.

In the upper face or sides of the side pieces C C are made longitudinal grooves *e e*. Lying on top of the said side pieces C C are blocks D D, having a tongue or pins on their under surfaces, which play in the aforesaid grooves *e e*, serving as guides to the blocks. These blocks are held in place by means of screw-clamps E E, embracing both the blocks and side pieces. On the top of each of said blocks is placed a spring-plate, F F, fastened at one end. Through said spring-plates are put thumb-screws *f f*. Between the forward ends

of these plates and the blocks is held the knife to be ground. Small bearing-blocks *g g* are secured to the inside of the side pieces C C, which serve as guards to prevent the edge of the adjoining tooth of the knife from touching the side of the stone while grinding a tooth.

To the frame which supports the stone A, through the end piece, is placed a rod, H, having a clamp and screw, *h*, by which it may be adjusted, on the top of which the end of the knife-holding frame rests.

The operation of this is as follows: The blocks D D, for holding the knife to be sharpened, may be slid upon the side pieces C C, and secured in position for grinding each side of the tooth-sections of said knife, the knife being slipped along on the blocks, and each tooth ground successively. When all the teeth have been sharpened on one side the blocks are shifted for grinding the other side.

The object of the supporting-rod H is that, in case of any uneven places in the grinding-surface of the stone, the knife shall not be ground unevenly, and the result will be that the stone would be worn down true.

With this attachment harvester-knives are easily ground on any grindstone.

Should there be no means of attaching the uprights B B to a rude frame supporting the stone, a post might be driven or set into the ground for the purpose.

Having described my invention, I claim—

1. The frame C C, having longitudinal grooves *e e*, the blocks D D, having spring-plates F F, with thumb-screws *f f*, the clamps E E, and bearing-blocks *g g*, when constructed substantially as described, in combination with grindstone A, as and for the purpose set forth.

2. The adjustable supporting-rod H, in combination with holding-frame C C and grindstone-frame, as shown and described.

GEORGE A. WHITNEY.

Witnesses:

G. H. ROBBINS,
CHARLES HASTINGS.