

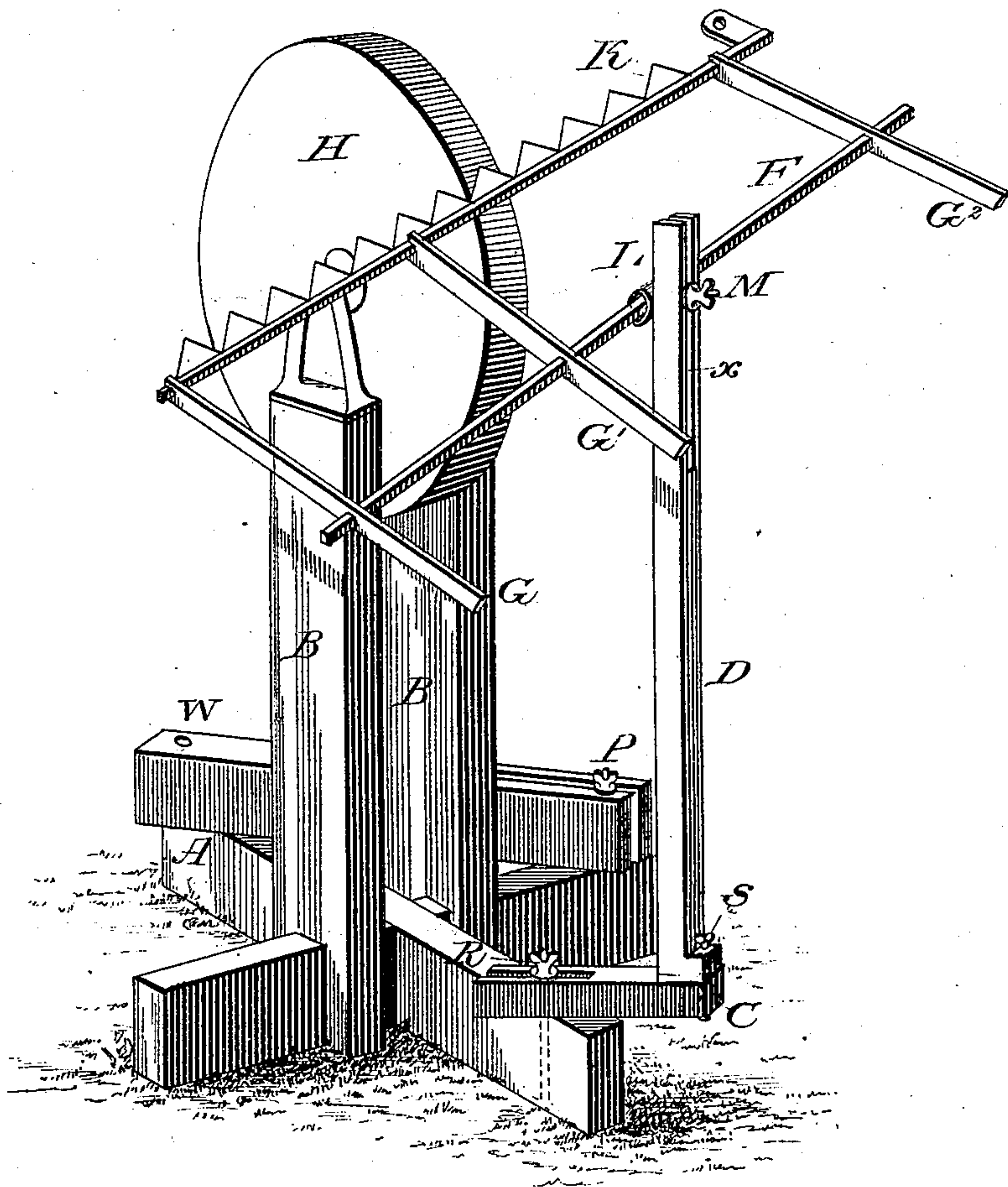
(Model.)

J. R. HAMILTON.

HOLDER FOR MOWER AND REAPER KNIVES.

No. 270,790.

Patented Jan. 16, 1883.



Witnesses:
E. A. Briggs
Wm. S. Perry

Inventor:
J. R. Hamilton

UNITED STATES PATENT OFFICE.

JONATHAN R. HAMILTON, OF KINGSTON, ASSIGNOR OF ONE-HALF TO PETER JOHNSON, OF DASSEL, MINNESOTA.

HOLDER FOR MOWER AND REAPER KNIVES.

SPECIFICATION forming part of Letters Patent No. 270,790, dated January 16, 1883.

Application filed January 11, 1882. (Model.)

To all whom it may concern:

Be it known that I, JONATHAN R. HAMILTON, of Kingston, in the county of Meeker and State of Minnesota, have invented a new and Improved Holder for Mower and Reaper Knives while being Ground; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is an improvement in a class of apparatus adapted for holding the cutter-bars of reapers and mowers while being ground, the construction and arrangement being usually such that the cutter-bars are held fixed at a certain inclination, yet permitting them to be slid lengthwise, so as to bring their knives successively in contact with the grindstone.

The improvement consists in the construction and combination of parts, as hereinafter described, whereby I produce a simple, cheap, easily-adjusted, and efficiently-operating apparatus.

In accompanying drawing, the figure illustrates a perspective view of said apparatus as arranged for use.

The letter H indicates a grindstone, which is hung in uprights B B, having a suitable base, A. Rotary motion will in practice be imparted to the grindstone by means of a crank and treadle. (Not shown.) The adjustable frame for supporting the cutter-bar K while being ground consists of the following parts, to wit: the horizontal slotted bar C, secured by bolt R to the base A; the vertical standard D, which is attached to said bar C by means of a screw, S; the band L, attached to the slotted upper end of standard D by screw-bolt having nut M; the rod F, that slides freely in said band, and arms G G' G², which are adapted to slide on and be removed from the rod F. The cutter-bar K is held in the outer or free ends of these arms G G' G², which have notches or open slots to receive the same. The aforesaid bar C may be shifted right or left to enable one to place the cutter-bar K in the required relation to the stone for grinding either edge of the knives or cutters. The slot in said bar C allows the standard D to be adjusted toward or from the stone H, and the standard may be turned on its axis by loosening the clamp-screw S. The band L may also be set higher or lower

in the slot *x* of standard D, and it may be inclined at different angles to a horizontal plane.

The manner of using the apparatus is as follows: The cutter-bar K is placed in arms G G', the arm G² being detached. The band L is then adjusted to the proper height by means of bolt M in slot *x* of standard D, and the latter is also adjusted on bolt S and the bar C placed at such horizontal angle as to insure the cutter-bar being held at the proper angle to the face of the stone H. The said parts C D L are then clamped in such position and the rod F slid to the left until the last section of cutter-bar K lies on the face of the stone, when the grinding is begun. The operator stands erect and works the treadle, (not shown,) and as knife after knife is ground moves the rod F to the right. After having ground three or four cutters the holding-arm G² is put on the rod F, the arm G detached, and the arm G' moved to the left to within about two inches from the end of the cutter-bar. After having ground one side of the knives, I loosen band-nut M, swing arm C to the left, or into the opposite diagonal position, and place the cutter-bar K at the inclination required for grinding the other edges. If the crank of the grindstone is long, it may prevent this being done, and in such case it will be necessary to place the cutter-bar holding devices on the other side of the stone, which is effected by aid of the bar W. The latter is secured horizontally to the base A by a bolt, P, passing through its slotted end, which enables its free end to be swung around into convenient proximity to standard D, which is then detached from bar C and secured to the end of W. The latter is then swung back into the position shown in the drawing and the parts D L F adjusted as required for completing the grinding operation.

I do not claim an apparatus of this class having devices for holding a cutter-bar which permit it to be adjusted at different inclinations or moved endwise, as above described.

What I do claim is—

1. The combination, with the sliding rod F and band L, made adjustable vertically, and around the bolt whereon it is pivoted, of the arms G G' G², which are adapted to slide on said rod F and be detached therefrom, and

have notches in their outer ends to receive the cutter-bar, all as shown and described.

2. The combination, with grindstone-frame A B, of the sliding detachable arms G G' G² 5 for holding the cutter-bar, the sliding rod F, the rod-holding band L, pivoted and adjustable, as specified, the vertical standard D, which

is slotted and adjustable, and the horizontal slotted bar C, all arranged as shown and described, to operate as specified.

JONATHAN B. HAMILTON.

Witnesses:

W. S. WHITNEY,
E. A. BRIGGS.