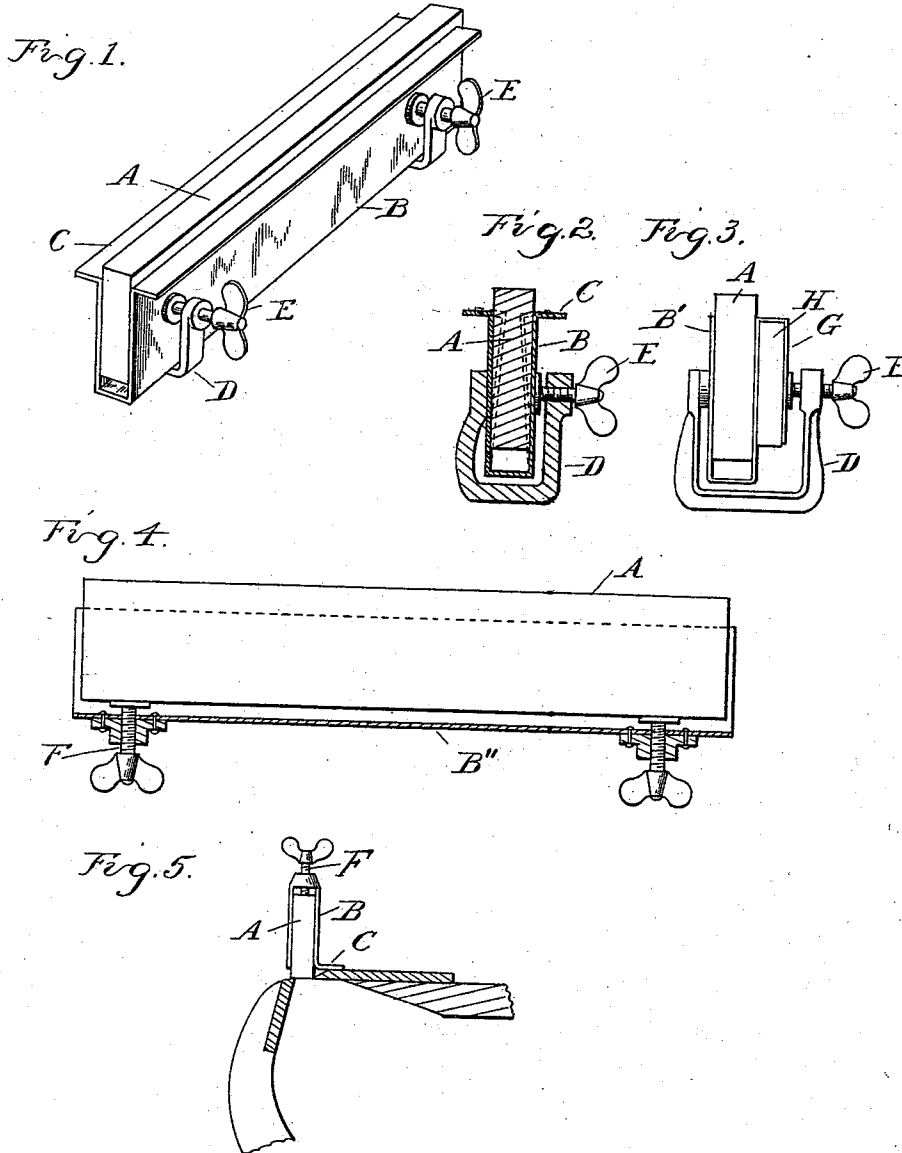


(No Model.)

W. A. SWEET, Jr.
LAWN MOWER SHARPENER.

No. 534,770.

Patented Feb. 26, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM A. SWEET, JR., OF CARSON CITY, MICHIGAN.

LAWN-MOWER SHARPENER.

SPECIFICATION forming part of Letters Patent No. 534,770, dated February 26, 1895.

Application filed June 7, 1894. Serial No. 513,735. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. SWEET, Jr., a citizen of the United States, residing at Carson City, in the county of Montcalm and State of Michigan, have invented certain new and useful Improvements in Lawn-Mower Sharpeners, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in a grindstone, and a gage and holder therefor adapted to support the stone on the mower in proper relation to the rotating blades to sharpen the same as the blade is revolved.

The invention further consists in the peculiar construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a perspective view of my improved device. Fig. 2 is a section thereof through one of the clamps. Fig. 3 is an end elevation of a slightly modified form. Fig. 4 is a longitudinal section through a still further modified form, and Fig. 5 is an end elevation of the construction shown in Fig. 4, showing it applied as in use.

A is a grindstone or other grinding block, preferably rectangular and B is a holder therefor. This holder I preferably make of sheet metal forming it in substantially U shape or trough shape, as shown in Fig. 1, and of a size so that the stone A will fit snugly therein. The lower edges of this holder I bend in slightly so that when the stone is in position therein they will act as a clamp to prevent it from accidental disengagement as shown in dotted lines Fig. 2. At the lower edge of the holder I form the laterally extending guide flanges C preferably on both sides.

D are clamping frames and E is the screw thereof, the frames being adapted to embrace the upper edge of the holder and the screw to clamp thereon, to hold the stone in position firmly with its lower edge in any desired relation to the flanges C.

Instead of using the clamps E I may make the holder of sufficiently strong spring metal to act as the clamp as shown at B' Fig. 4

and having adjusting screws F at the upper edge of the holder, for adjusting the stone in and out.

With the construction shown in Fig. 2, I am enabled to use the flange C as the guide flange which is adapted to rest upon the stationary knife blade of the lawn mower, as shown in Fig. 5, while the rotary cutter is revolved, striking against the lower edge of the stone, and thus sharpening the same.

In Fig. 3 I have shown the holder or guide formed of a U-shaped piece of metal B' having one of its sides bent over forming an inverted U shaped section G in which is a filler block H against which the clamp may work. This makes a more substantial and rigid guide or gage than in the construction shown in Figs. 1, 2, 4, and 5.

In use the lawn mower is turned upside-down and the device applied as shown in Fig. 5. The stone may be adjusted in or out to any desired degree, so that the cutting edge of the rotary blades will just strike the same in turning. The motion is then imparted to the rotary cutters and the stone moved along across the stationary blade, until the blades are properly sharpened, thus insuring a perfectly even sharpening of the rotary blades at all points in their length. The guide flanges on the sides act as a support to rest the holder against the stationary blade while the U-shaped holder itself forms a convenient handhold for the operator.

What I claim as my invention is—

1. The combination with the stone or grinding block, of a holder therefor having an open lower edge, and a lateral guide flange on the holder, substantially as described.

2. In a lawn mower sharpener, the combination with a U-shaped sheet metal holder, of a stone or grinding block, means for holding the stone at any desired position in the holder, and a lateral guide flange on the lower edge of the holder, substantially as described.

3. In a mower sharpener, the combination with a stone or grinding block, of a U-shaped metal holder for the stone, clamping frames on the holder, and means passing through the

frames for adjustably securing the stone in the holder, substantially as described.

4. In a mower sharpener, the combination with a stone or grinding block, of a U-shaped
5 metal holder for the stone, clamping frames on the holder, means passing through the frames for adjustably securing the stone in the holder, and a bearing block secured to one side of the holder interposed between the

holder and said adjusting means, substantially as described.

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

WILLIAM A. SWEET, JR.

Witnesses:

JAMES WHITEMORE,
L. J. WHITEMORE.