

H. R. ATWATER.
LAWN MOWER SHARPENER.
APPLICATION FILED AUG. 30, 1905.

956,873.

Patented May 3, 1910.

Fig. 1.

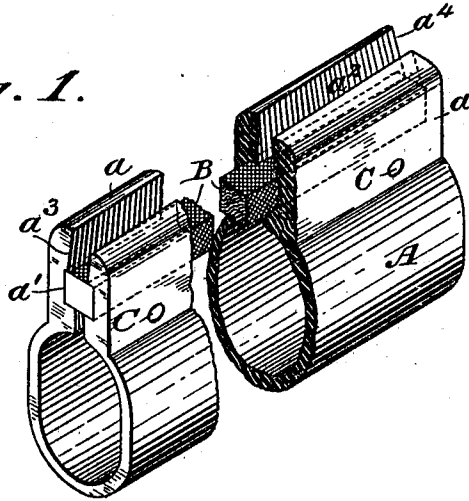


Fig. 2.

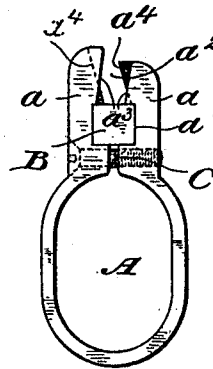
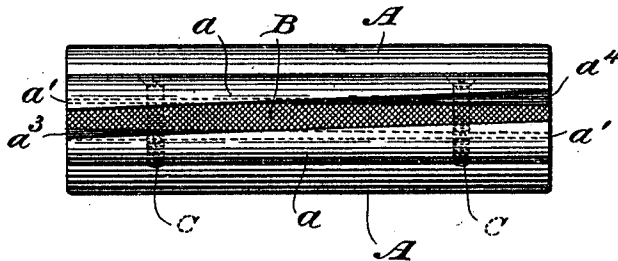


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HARRY R. ATWATER, OF CLEVELAND, OHIO, ASSIGNOR TO THE OSBORN MANUFACTURING CO., OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

LAWN-MOWER SHARPENER.

956,873.

Specification of Letters Patent.

Patented May 3, 1910.

Application filed August 30, 1905. Serial No. 276,389.

To all whom it may concern:

Be it known that I, HARRY R. ATWATER, a citizen of the United States, resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Improvement in Lawn-Mower Sharpeners, of which the following is a specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to lawn-mower sharpeners and particularly to that class of the latter in which means are provided for presenting the lawn-mower blade to the abrasive tool at the same angle along the entire edge of the spirally or helically-shaped blade so as to grind or sharpen said edge to a uniform bevel.

Said invention consists of means hereinafter fully described and specifically set forth in the claim.

The annexed drawing and the following description set forth in detail certain mechanism embodying the invention, such disclosed means constituting but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing: Figure 1 represents a broken perspective view of my improved lawn-mower sharpener; Fig. 2 represents an end view thereof; and Fig. 3 a front elevation.

In my improved lawn-mower sharpener I provide a suitable handle A having two projecting lips a , in offsets a' of which is secured a file or other suitable abrasive tool B. Said tool B, in the form illustrated, is square in cross-section and all of its four surfaces are cutting surfaces and can be turned into action successively, according as they become worn. The tool B is retained securely between the lips a by means of the screws C. The inner surfaces of the lips a exterior to the tool B are of complementary helical conformation so that there is formed between them a spiral or helical groove or guideway

a^2 conforming in contour to the blade of a lawn-mower. This is plainly shown in Fig. 2 where the inclination of the near and far ends a^3 , a^4 , respectively, of the guideway a^2 can be seen. The handle A can be made of any suitable metal or wood, and it is often found convenient to form the same of two pieces united by means of screws inserted transversely through the body of the handle instead of inserting them transversely through the inner ends of the lips as shown in the accompanying drawing.

The above-described construction enables the sharpener to be moved back and forth along a lawn-mower blade which is retained between the lips a adjacent to the tool B so that the latter contacts with said blade at all points at the same angle so as to grind thereon a uniformly beveled cutting edge.

Having thus described my invention in detail, that which I particularly point out and distinctly claim, is:

In a lawn mower sharpener, the combination with a handle of general tubular form, split longitudinally along one side and having two projecting lips, one on each side of the opening thus provided, each lip being provided with an offset extending throughout its length; of an abrasive tool fitted in said offsets and removably secured between said lips, the inner surfaces of said lips respectively, being of complementary helical contour and forming a continuous helical guideway between the lips from end to end of the handle, whereby the face of said abrasive tool is at all times presented at an unvariable angle to a lawn mower blade as said sharpener is moved therealong, and means for drawing said lips together to retain said tool in place therebetween.

Signed by me this 12th day of August 1905.

HARRY R. ATWATER.

Attested by—

JNO. F. OBERLIN,
G. W. SAYWELL.