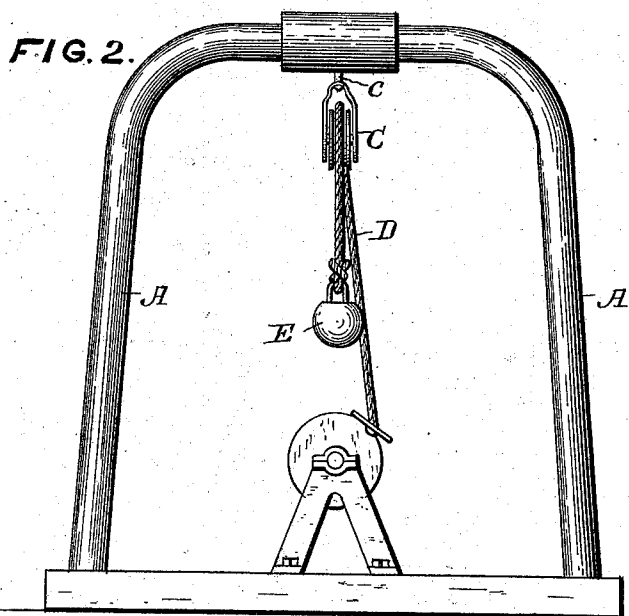
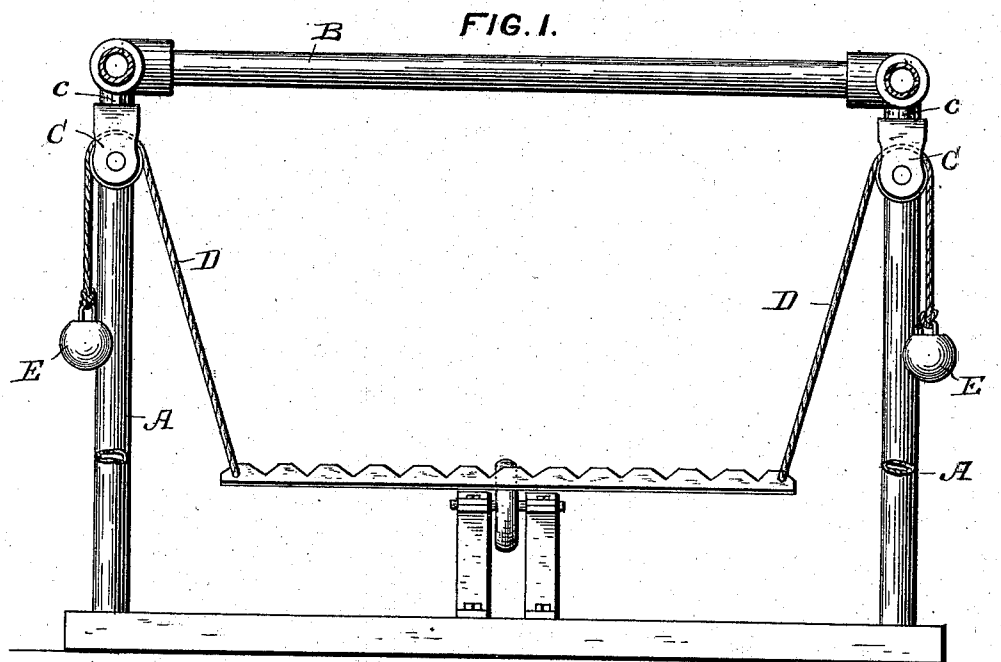


(No Model.)

W. C. CASE.
GRINDING MOWING MACHINE KNIVES.

No. 562,456.

Patented June 23, 1896.



ATTEST.

J. Henry Kaiser.
Wm. J. Pelston.

INVENTOR.

William Campbell Case
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UNITED STATES PATENT OFFICE.

WILLIAM CAMPBELL CASE, OF DEXTER, NEW YORK.

GRINDING MOWING-MACHINE KNIVES.

SPECIFICATION forming part of Letters Patent No. 562,456, dated June 23, 1896.

Application filed October 28, 1895. Serial No. 567,211. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CAMPBELL CASE, a citizen of the United States, residing at Dexter, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Grinding Mowing-Machine Knives; and I do declare the following to be 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 drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improved device for facilitating grinding mowing-machine knives, and has for its object to provide improved means for suspending the knife in operative engagement with a grindstone in such manner that the knife may be raised and lowered and turned to different angles with ease and rapidity and without fatigue or undue labor to the operator, whereby the hands of the operator are left free to guide and manipulate the knife with accuracy and precision.

To these ends my invention consists in the novel features of construction and in the arrangement and combination of parts herein-after fully described, and definitely pointed out in the claim following the description, due reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a front elevation of my improved device, and Fig. 2 is an end view of the same.

In order that those skilled in the art may make and use my improved device, I will now describe the same in detail, reference being had to the said drawings, wherein like letters of reference refer to corresponding parts in both figures.

Referring to said drawings, the letters A indicate two similar and parallel arched standards that are united at their upper ends by a cross-bar B. Suspended from the center of each of the arched standards A are pulleys C, that are swiveled to said uprights, as

at c, so that said pulleys are free to turn easily in every direction. Ropes D are passed over the pulleys C, and each of said ropes has attached to one end a weight E, the other end of the rope being adapted for attachment to one of the ends of the mower-knife.

In practice the weights will be sufficiently heavy to balance the weights of the knife.

The frame is designed to be placed centrally over a grindstone, and the cords or ropes D are attached to the opposite ends of the knife to be sharpened. The grindstone may be driven by manual or other power, or instead of a grindstone any usual and well-known or suitable type of sharpening or grinding machine may be employed.

The operator grasps the knife in his hands and successively presents the cutting edges of the knife to the grindstone. By raising and lowering the opposite ends of the knife the oppositely-inclined cutting edges can be properly presented to the grindstone, and by drawing the knife toward him or thrusting it from him, or by inclining the knife more or less to the straight line assumed by the cords or ropes, the proper level is given to the knife to form a true cutting edge. The knife may in like manner be raised and lowered, and swung from one side to the other, and freely moved in every direction. It will be apparent that all these movements are accomplished with ease, the weights balancing the knife in such manner that the operator is entirely relieved of the weight of the knife, his hands being thus left free to guide and manipulate the knife with ease and accuracy, thus greatly facilitating the operation and saving the operator labor and fatigue.

By swiveling the pulleys in the manner described the knife may be freely turned in every direction with the utmost ease and without liability of twisting the cords or ropes.

The device is extremely portable and is adapted for use in connection with grinding-machines in general.

Having described my invention, what I claim is—

In a device of the nature described, the

combination of an upright frame, of two pulleys respectively swiveled at the opposite sides of said frame and cords or chains passing about said pulleys and adapted to be connected at one end to the knife to be ground, and having attached at their opposite ends counterweights, substantially as described.

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

WILLIAM CAMPBELL CASE.

Witnesses:

JAMES A. GILMORE,
WM. H. WINN.