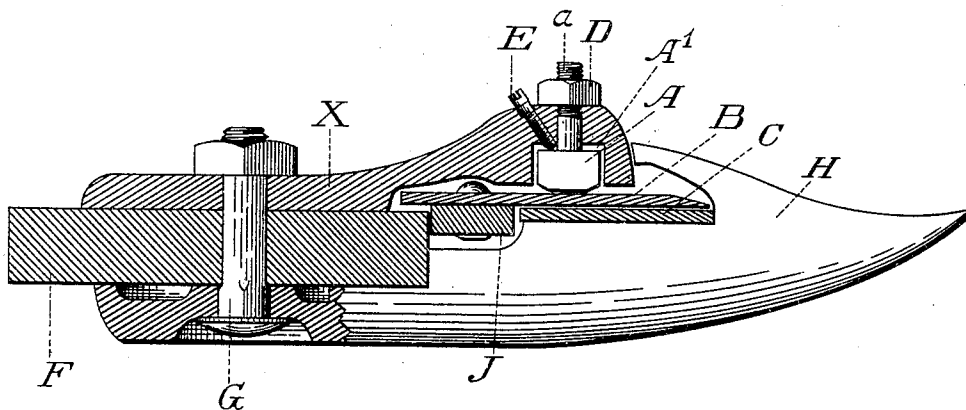


No. 792,021.

PATENTED JUNE 13, 1905.

D. GRIFFITHS.
MOWING MACHINE.
APPLICATION FILED JULY 2, 1904.



Witnesses :

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UNITED STATES PATENT OFFICE.

DAVID GRIFFITHS, OF BLAENWAUN-FACH, LLANGUNLLO PARISH,
ENGLAND.

MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 792,021, dated June 13, 1905.

Application filed July 2, 1904. Serial No. 215,196.

To all whom it may concern:

Be it known that I, DAVID GRIFFITHS, a subject of the King of Great Britain, residing at Blaenwaun-fach, Llangunllo parish, county of Cardigan, England, have invented a new and useful Improvement in Mowing-Machines, of which the following is a specification, reference being had to the accompanying drawing, on one sheet, making part of this specification.

My invention relates to that class of mowing-machines in which a so-termed "finger-bar" carrying the cutting parts is used; and the object of the same is to provide means whereby the cutters or sections may be maintained in close cutting contact with the cutter-plates or soles usually provided on the fingers or guards of said finger-bar. I attain this object by means of the mechanism shown in the accompanying drawing, which is a sectional end view of the finger-bar of a mowing-machine as commonly constructed, with my improvement fixed in working position thereon and relatively to the cutter-bar and its sections in the fingers of the same.

Under certain conditions of the grass, grain, or other growth being mowed or harvested much difficulty has at times arisen by its being drawn between the cutters and the cutting-plates or soles, causing the same to become clogged and practically inoperative until they have been cleared. At times also and after prolonged use the cutting edges of the sections or cutters become dulled and otherwise deranged, necessitating the removal of the cutter-bar carrying the same for the purpose of grinding or otherwise sharpening said sections. I obviate the difficulties enumerated by an appliance which serves to assure a close cutting contact between the said sections or cutters of the cutter-bar and the cutting-plates or soles, which are carried on the fingers of the finger-bar, and which appliance I will now explain.

In the drawing, F is the finger-bar, on which is carried at desired intervals in its length the fingers or guards H and the clips X, both of which are maintained in a fixed position thereon by the bolt G, as plainly seen. The fin-

gers or guards H are suitably furnished with a cutter-plate or sole C. A cutter-bar J, on which are fastened the sections or cutters B, has a reciprocating motion between the extended end of the clip X and the fingers or guards H, the whole being arranged in working relation to each other, practically as shown in the drawing.

My improvement relates more particularly to the aforementioned clip X, which is maintained in a rigid and fixed position on the finger-bar F by the bolt G, as already mentioned. The said clip X extends over the cutters B and is practically of the form shown in the drawing. It is provided on its under side at the outer end with the recess A', the stud A, and the threaded set or lock pin E, the object of which arrangement of parts I will now describe.

The stud A is provided with a threaded shank *a*, which passes upwardly through the clip X and on which said threaded shank *a* screws the nut D, by means of which the said stud A can be raised or lowered in the recess A' of the clip X and arranged with relation to the section or cutter as desired, as will presently be seen. A threaded set or lock pin E is provided in close proximity to the stud A and near the end of the clip X, as shown in the drawing, the object of which will presently be seen.

It will be observed that the stud A is arranged in the recess A' of the clip X so that it will practically be over the middle part of the cutter B of the cutter-bar J. By this arrangement I am enabled to bring the stud A either to bear directly upon or in close proximity with the upper face of the cutter B to the desired degree by loosening up the nut D of the threaded shank *a*, and thus cause the said stud A to force the cutter B in close cutting contact with the cutter-plate or sole C, where the desired position is maintained by screwing down the set or lock pin E against the top of the stud A, as is plainly shown in the drawing. By this means it will be evident I am able to maintain the close cutting contact of the sections or cutters with the cut-

ter-plates or soles of the guards during the operation of cutting or mowing, the two members through the consequent wear of abrasion being self-sharpening, thus rendering the removal of either for the purpose of sharpening needless. Besides where the cutting contact of the two is thus maintained it will be evident it becomes impossible for the material being operated on to be drawn between them so as to clog up the same.

The friction of the stud A on the upper face of the section or cutter B during the operation of cutting is minimized by providing it with a rounded end somewhat as shown, or, if thought necessary, it might be provided with a roller for the purpose.

Having thus described the several parts of my improvement and its mode of operation,

what I claim as new, and desire to secure by Letters Patent of the United States, is—

In a mowing-machine a finger-bar clip having a recess over the cutter-section provided with an adjustable stud having a threaded shank provided with a nut on the outer side of said clip and a set or locking pin constructed and arranged substantially in the manner and for the purpose herein described and shown.

In testimony whereof I have hereunto set my hand, this 27th day of July, 1903, at Blaen-waun-fach, Maesllyn, Llandyssul, South Wales.

DAVID GRIFFITHS.

In presence of—

THOMAS JONES,
JAMES J. DAVIES.