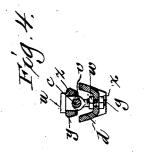
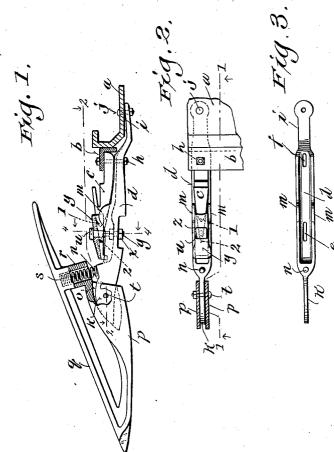
## ATTACHMENT FOR FINGER BARS OF MOWERS OR HARVESTERS.

(Application filed May 8, 1901.)

(No Model.)





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## UNITED STATES PATENT OFFICE.

WILLIAM GATERMANN, OF NEWTON, WISCONSIN.

## ATTACHMENT FOR FINGER-BARS OF MOWERS OR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 700,029, dated May 13, 1902.

Application filed May 8, 1901. Serial No. 59,239. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GATERMANN, a citizen of the United States, and a resident of Newton, in the county of Manitowoc and 5 State of Wisconsin, have invented certain new and useful Improvements in Attachments for Finger-Bars of Mowers or Harvesters; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to devices adapted to be attached to the finger-bars of mowers or harvesters; and it consists in certain improvements on the attachments shown in my prior patent, No. 655,339, dated August 7, 1900, as will be fully set forth hereinafter in connection with the accompanying drawings and subsequently claimed.

subsequently claimed.

In the said drawings, Figure 1 represents a side elevation of my present improvements, partly in section on the line 1 1 of Fig. 2; Fig. 2, a plan view of said parts, partly in section on the line 2 2 of Fig. 1; Fig. 3, a detached plan view of the casting which supports the guard, and Fig. 4 is a detail transverse sectional view taken on the line 4 4 of Fig. 1.

In fitting up mower or reaper finger-bars with the pea-harvesting attachments shown in my said prior patent it is found at times that the knife-guards are longer or shorter than those of the average length for which my said attachments are especially designed; and the object of my present invention is to obviate the inconvenience resulting from this state of facts and provide adjustable means to accommodate this varying length of said knife-guards.

Referring to the drawings, a represents the platform of the machine to which my attachments are to be applied, and b the finger-bar, while c represents one of the knife-guards, beneath which parts is located a casting d, provided with longitudinal slots e f for the passage therethrough and longitudinal adjustment of bolts g h, as hereinafter described. The casting d is further formed with an offset rear projection i, having a perforation in its rear end, whereby the said end of the casting may be secured to the platform a by a bolt j and suitable nut. The said casting d is fursion thereformed with a thin vertical pointed head k, between which and the said rear projection i the casting is provided with a longitu-

dinal recess on its upper face, leaving thereby parallel outer side ribs, as best shown in Fig. 3, which ribs are centrally extended into up- 55 wardly-projecting ears mm, and just back of the described head k, and, like said head, in line with the longitudinal center of the casting d, is an upward-projecting stud n. The head k of casting d is received within a some- 60 what larger socket o in the rear end of a shoe p, from which rises a rearwardly-extending obliquely-inclined lifting-arm q, designed to raise pea-vines or lodged grain, as the case may be, said arm having a downwardly-pro- 65 jecting hollow extension r, which receives the upper end of a coiled spring s, whose lower end encircles the described stud n on the cast- $\operatorname{ing} d$ , and the said casting-head k is pivotally secured within the shoe-socket o by means of 70 a bolt t.

The hereinbefore-referred-to bolt g has a screw-threaded shank and a head u, as best shown in Fig. 4, said bolt having a central opening v therethrough for receiving the for- 75 ward end or point of the guard c when said guard is of the requisite length to be received therein, and the shank of bolt g (which projects through the slot e) is provided with two nuts w x, whereby when said bolt has been 80 longitudinally adjusted within said slot it is tightened to place, said nut permitting also of any desired vertical adjustment. It sometimes happens that the knife-guards of a mower or harvester are too short to reach this 85 bolt, and to enable my device to be conveniently used in such cases I provide a clamp or casing y, having a hole or slot z therein. This casing has two edge extensions in line with said slot, and these extend over the de- 90 scribed side ribs of the casting d, the rear end of said casing fitting between the described ears m m and the front end of said casing having a downturned lip which fits between said ribs of the casting, as shown in Figs. 1 95 and 2, whereby the casing is held against lateral movement when it is secured in place by the bolt g, whose head is fitted within the casing-slot z. When this device is used with a short guard c, the forward end or point of said 100 guard is received within the rear end of the casing y, and if the guard is longer then its point extends within the opening v in the bolt u, as already described, this being clearly in2 700,029

dicated by the two dotted representations of guard-points shown in Figs. 1 and 2 and marked 1 and 2, respectively. When the guards c are bolted to the finger-bar b of the 5 machine, a longer bolt h is substituted for the original bolt, so as to have the said bolt pass through the slot f in the casting d and be secured by nuts, as shown; but if it be found that the guards are riveted to the finger-bar to then the rear attachment of the casting d may belmade by the described bolt j, passed through a hole made in the platform a and secured by a nut, as already described, and thus it will be seen that by my present improvements my 15 attachments can be secured to any ordinary mower or harvester irrespective of the length or original attachment of the knife-guards in such machine.

The operation of my present attachments 20 is in all essential respects the same as in my prior patent hereinbefore referred to, same being designed for use in the harvesting of peas by an ordinary mower or harvester, as well as in the cutting of lodged grain, and I 25 have not deemed it necessary to illustrate the swath-removing fingers in the present drawings, as the same would be in substance identical with those shown in said patent, and practically the same arrangement and 30 attachment of parts herein illustrated would be employed for the entire series of guards on the finger-bar, including the outer guard, where the backward-extending inclined arm of the outer shoe on the grain side would serve 35 as a divider-arm to separate the cut mass of vines or grain from the uncut portions in the field, just as in the said prior patent.

The easing y, hereinbefore described, constitutes a clamp, and same may be somewhat 40 varied in form or arrangement, if desired, it being only essential that the points or forward ends of the guards shall be held tightly in place by bolts between said clamps and

castings.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the finger-bar and

guards of a mower or harvester, a series of castings, provided with longitudinal slots, 50 shoes pivotally attached to the forward ends of said castings, and provided with backward-extending oblique arms with spring connections to said castings, and bolts longitudinally adjustable in said slots and provided 55 with means for the reception of the points or forward ends of said guards.

2. In combination with the finger-bar and guards of a mower or harvester, a series of castings, provided with longitudinally-re-60 cessed upper faces, and longitudinal slots therethrough, shoes pivotally attached to the forward ends of said castings, and provided with backward-extending oblique arms with spring connections to said castings; clamps 65 or casings fitted to said castings, each clamp or casing having a hole therethrough; adjustable bolts, each bolt having a head and a central opening therethrough, and a screwthreaded shank adapted to pass through said 70 hole in the clamp or easing, and through the corresponding slot in the casting to which said clamp or easing is secured, for the reception of the points or forward ends of said guards, and nuts on each of said bolt- 75 shanks for securing the same in place in the desired adjustment, whereby said castings are adapted for use in supporting the forward ends of said guards, irrespective of the length or angular projection of the latter.

3. In combination with the finger-bar and guards of a mower or harvester, a series of castings, with clamps supported on said eastings, and held against lateral movement by the upper edges thereof, for receiving the 85 points or forward ends of said guards, and bolts for securing said parts together.

In testimony that I claim the foregoing I have hereunto set my hand, at Manitowoc, in the county of Manitowe and State of Wis- 90 consin, in the presence of two witnesses.

WILLIAM GATERMANN.

Witnesses: E. G. Nash, PEARL SMART.