No. 650,889. Patented June 5, 1900.

H. A. ABROTT.

SWATH CLEANER FOR MOWING MACHINES.

(Application filed July 15, 1899.)

(No Model.)

Fig. 1.

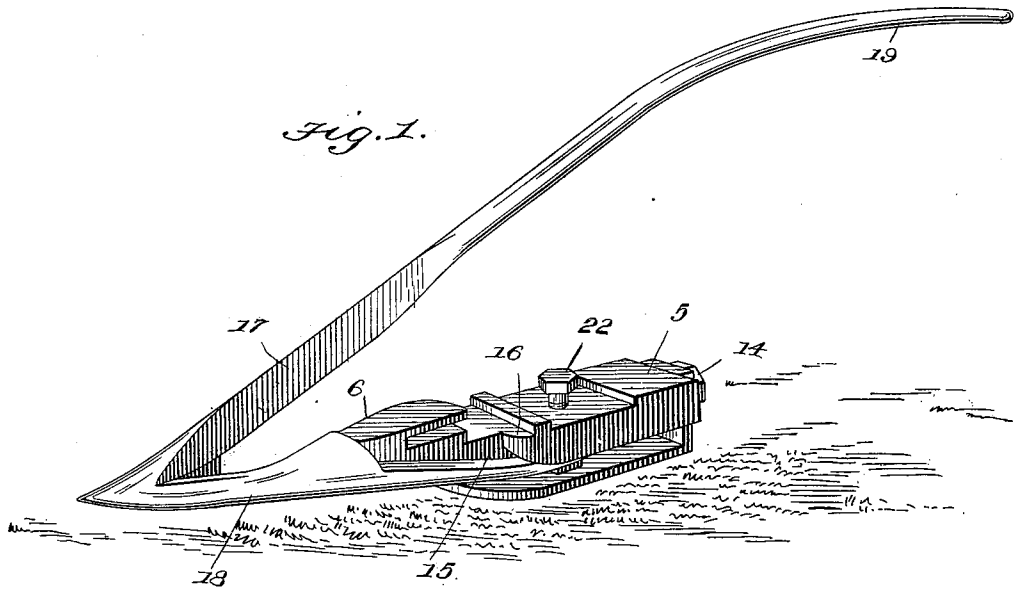


Fig. 2.

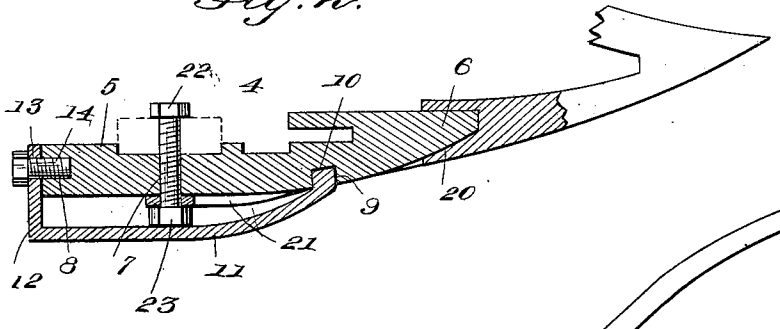


Fig. 3.

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UNITED STATES PATENT OFFICE.

HARRY A. ABROTT, OF SUNOL, CALIFORNIA.

SWATH-CLEANER FOR MOWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 650,889, dated June 5, 1900.

Application filed July 15, 1899. Serial No. 723,974. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. ABROTT, a citizen of the United States, residing at Sunol, in the county of Alameda and State of California, have invented a new and useful Improvement in Swath-Cleaners for Mowing-Machines, of which the following is a specification.

My invention relates to the general class of mowing-machines, but more particularly to an attachment to be applied to the most distant guard-finger on the cutter-bar.

One object of my invention is to provide a device for cleaning the swath of grain or clover in the process of harvesting, whereby the grain or clover will be guided toward the machine just previous to being cut in a crowded condition in order that the harvested material will be thrown a considerable distance to one side of the swath by the action of the cutting apparatus.

A further object is to provide a device of the character described of improved construction which can be readily removed and applied to the guard-finger and secured thereto by a single bolt.

Another object is to provide an upwardly-extending arm with a knife-edge, whereby any matter becoming tangled thereon will immediately be cut.

Another object is to provide a brace or runner secured to the bottom of the guard-finger which will give a slight elevation to the cleaner, support the same, and at the same time prevent the bolt which secures the cleaner to the guard-finger from becoming dislodged.

With these objects in view the invention consists of a guard-finger on the outer end of which is positioned a socketed bar having an upwardly and rearwardly extending curved guide-arm, whereby the material to be harvested is crowded toward the machine immediately before being engaged by the cutting apparatus.

My invention further consists of the parts and combination of parts, as will be more fully described in the accompanying specification, illustrated in the drawings, and recited in the claim hereunto annexed.

In the drawings, Figure 1 is a perspective view of a guard-finger, showing my invention applied. Fig. 2 is a longitudinal sectional view through the guard-finger, cleaner, and runner; and Fig. 3 is a detail perspective view of the cleaner detached.

Referring to the drawings by numerals, 4 designates a guard-finger of approved construction provided with the usual heel 5 and toe 6. Intermediate the heel and toe is a vertical opening 7, preferably screw-threaded, and an opening 8 is provided in the heel of the finger and extending therein a short distance, as will be presently explained.

9 is a socket provided in the under side of the guard-finger and forward of the vertical opening 7, into which fits the enlarged head 10 of the runner-plate 11. This plate is curved outwardly or bowed and has a right-angular flange 12 at its rear end, in which is a perforation 13, through which the bolt 14 passes and engages the opening 8 in the heel of the finger, and thereby secures the runner-plate thereto. It will be noticed that the toe of the guard-finger is cut away, as at 15, to provide a shoulder 16, the purpose of which will presently appear.

17 designates the cleaner proper, which consists of the bar 18, to the forward end of which is brazed or otherwise secured the upwardly-extending rearwardly and inwardly curved guide-arm 19. It will be noticed that intermediate the ends of this guide-arm I provide a knife-edge on upper portion which is adapted to cut any matter which in a tangled form may be engaged by the cleaner in the process of harvesting. The posterior portion of the bar 18 is enlarged to form a pocket or socket 20, and extending from the said enlarged portion of the bar is a rearwardly-projecting extension 21, carrying a perforated eye designed to register with the vertical opening in the guard-finger and engage the said opening through the medium of a bolt 22 and a nut 23.

In arranging my device on the mower the pocket of the cleaner is engaged by the toe of the guard-finger, and the rearwardly-projecting extension 21 being to one side thereof will lie snugly against the cut-away portion 15 of the finger, and after passing under the shoulder 16 the perforation will register with the vertical opening in the guard-finger. The bolt 22 is then passed through said vertical

opening and through the perforation, and the cleaner and guard-finger are rigidly locked together by means of the nut 23. Inasmuch as the aforementioned extension will snugly lie against the cut-away portion of the toe and under the shoulder 16, any possible play between the guard-finger and the cleaner is prevented. After the cleaner is secured on the guard-finger I insert the head 10 of the plate 11 into the socket 9, and after passing the bolt 14 through the perforation of the right-angular flange and into the opening 8 the device is complete. As this plate passes directly under and covers the nut 23, it not only acts as a runner-plate, but also serves as a nut-lock, as the nut will not become detached as long as the bolt 14 remains in place.

From the foregoing description it will be readily seen that I have provided a device of the character described exceedingly simple in construction, easily applied to a cutter-bar, and one that should be appreciated by those skilled in the art to which my invention appertains.

While I have illustrated what to me appears to be the best means for accomplishing the desired end, I would have it expressly understood that I reserve the right to make such slight changes and alterations as would properly come within the scope of my invention and which would be obvious to the skilled mechanic without departing in any way from the spirit thereof.

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

The combination with a guard-finger of a mowing-machine, the toe of which is cut away to provide a shoulder, of a forwardly-projecting bar provided with a socket to engage said toe, a rearwardly-extending upwardly and inwardly curved arm provided with a knife-edge and secured to the front end of the bar and a rearwardly-extending arm 21 secured to the rear end of the bar, to one side of the socket and adapted to lie snugly against the cut-out portion of the guard-finger and under the shoulder formed thereby, said last-named arm being provided with an eye to engage a bolt whereby it is secured to the guard-finger, substantially as described.

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