July 26, 1949. C. D. COOK 2,477,477

SCARIFIER ATTACHMENT TO GO ON ENDS OF PATROL BLADES

Filed Sept. 25, 1947

2 Sheets-Sheet 1

Fig. 1.

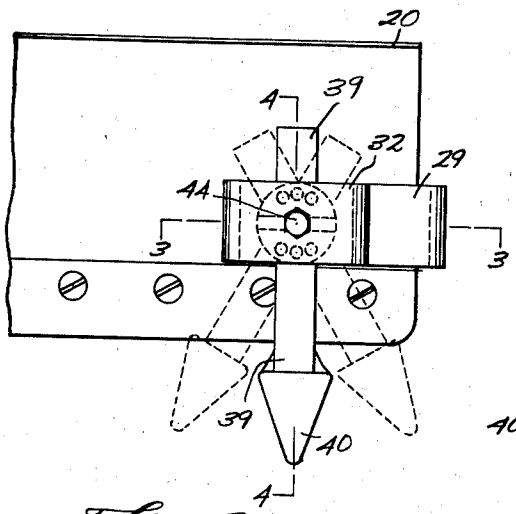


Fig. 2.

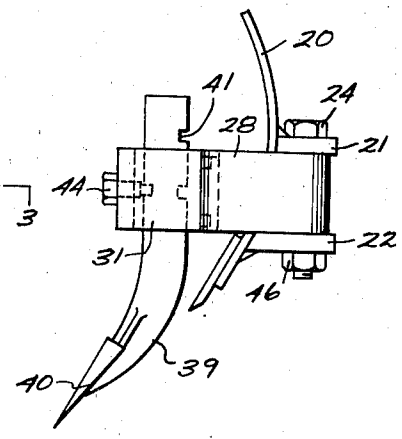


Fig. 3.

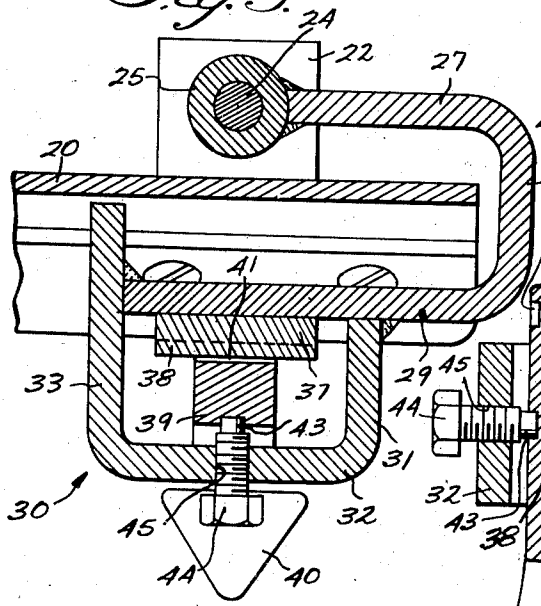
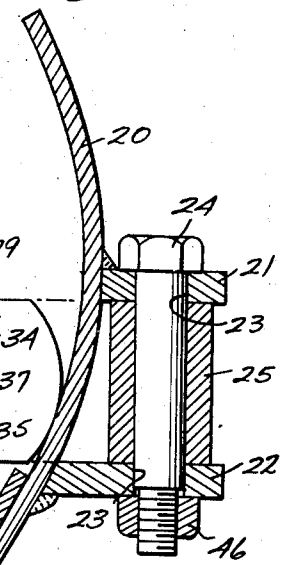


Fig. 4.



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2 Sheets-Sheet 2

Fig. 5.

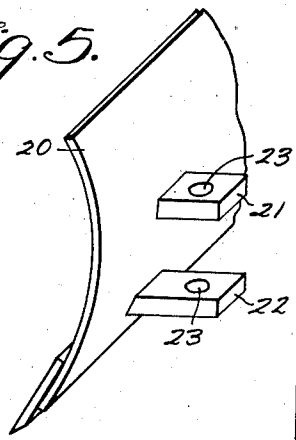


Fig. 6

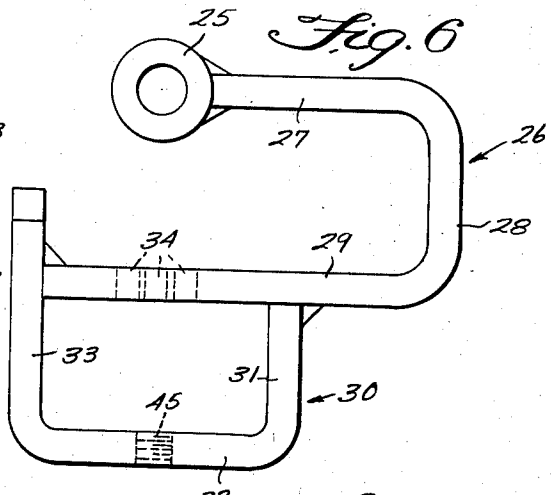


Fig. 8.

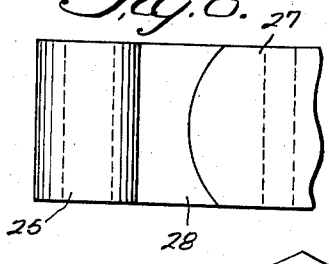


Fig. 7.

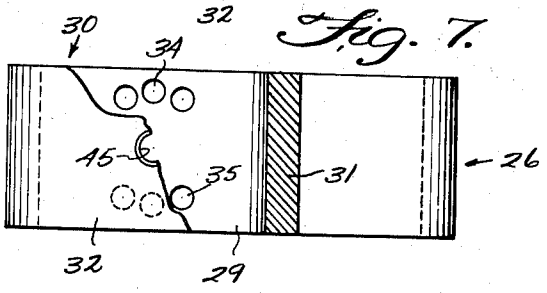


Fig. 9.

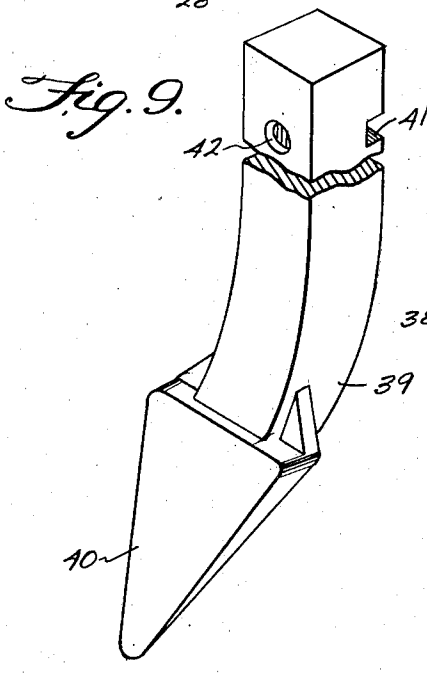


Fig. 10.

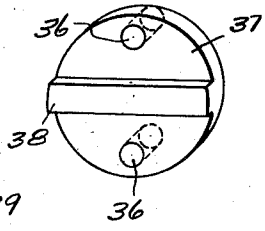
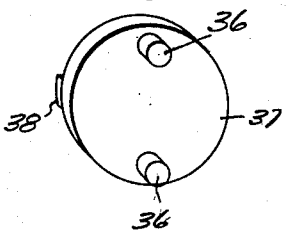


Fig. 11.



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SCARIFIER ATTACHMENT TO GO ON END OF A PATROL BLADE

Clifford D. Cook, Prosser, Wash.

Application September 25, 1947, Serial No. 775,985

4 Claims. (Cl. 262—8)

1

This invention relates to a scarifier attachment for a mold board or scraper blade.

An object of the invention is to provide an attachment of this character that can be secured to the end of the mold board or scraper blade adjacent one end thereof, so that the operator of the power unit carrying the board or blade can loosen the bottom of a drain ditch or a back slope that cannot be reached by the ordinary board or blade.

Another object of the invention is to provide an attachment of this character that can be easily attached to or removed from a mold board or scraper blade.

With the above and other objects and advantages in view, the invention consists of the novel details of construction, arrangement and combination of parts more fully hereinafter described, claimed and illustrated in the accompanying drawings in which:

Figure 1 is a fragmentary elevational view of a mold board or scraper blade with an embodiment of the invention attached thereto, and showing in dotted lines the various positions in which the embodiment can be adjusted;

Figure 2 is an end view of Figure 1;

Figure 3 is a sectional view on the line 3—3 of Figure 1;

Figure 4 is a sectional view on the line 4—4 of Figure 1;

Figure 5 is a fragmentary perspective view of the rear of the mold board or scraper blade showing the means whereby the embodiment is attached thereto;

Figure 6 is a plan view of the supporting and attaching bracket;

Figure 7 is a front view of the bracket, partly in section and partly broken away;

Figure 8 is a fragmentary rear view of the bracket;

Figure 9 is a perspective view of the scarifier tooth;

Figure 10 is a front perspective view of the mounting disc and

Figure 11 is a rear perspective view thereof.

Referring more in detail to the drawings, the numeral 20 designates a conventional mold board or scraper blade on which the embodiment of the invention later to be described is attached.

Secured to one end of the board or blade 20 on the rear surface thereof by welding or the like, are a pair of spaced parallel and horizontally arranged plates 21 and 22 respectively, each of which is provided with an opening 23 that are in vertical alinement with each other to receive the bolt 24 on which is mounted the tubular sleeve 25 between the plates 21 and 22. Secured to the sleeve 25 is a U-shaped bracket 26 having a short leg 27 which is welded to the sleeve 25 and is positioned at the rear of the blade 20, the base 28 which projects forwardly of the leg 27 and the long leg 29 which is positioned at the front of the blade 20.

2

Secured to the long leg 29 at forwardly extending right angles thereto is a second U-shaped bracket 30, having the short leg 31 welded to the face of the leg 29, the base 32 parallel with the leg 29 forwardly thereof, and the long leg 33 secured to the free end of the leg 29 and extending rearwardly thereof.

The leg 29 in the portion intermediate the legs 31 and 33 of the bracket 30 is provided with an upper arcuate row of spaced openings 34, and a lower row of similar openings 35, which are adapted to receive the studs 36 on the rear face of the mounting disc 37. The front face of the disc 37 is provided with a transverse rib 38 which is positioned at the center thereof in true right angular relation to the studs 36 on the rear face thereof.

With the studs 36 in the openings 34 and 35, the scarifying tooth 39 is positioned in the bracket 30 with the point 40 thereof at the bottom and one of the transverse grooves 41 in the tooth in engagement with the rib 38.

On the opposite side of the tooth, in alinement with the grooves 41, recesses 42 are provided to receive the reduced end 43 of the screw 44, which is threadably mounted in the tapped opening 45 in the center of the base 32 of the bracket 30.

In use, the tooth 39 is mounted so that the upper or lower groove 41 will engage the rib 38. The studs 36 are positioned in the openings 34 and 35 so that the tooth will assume either of the positions shown in Figure 1, and when the screw 44 is tightened, the tooth 39 will be retained in that position.

The nut 46, on the bolt 24, can be loosened to permit the bracket 26 to swing on the bolt 24, into any desired position, and when tightened, the nut 46 will retain the bracket in the desired position.

Thus the tooth can be adjusted for depth and for angularity of cut; it can work on the front end or rear of the blade to which it is attached to scarify locations that the blade cannot reach.

It is believed that from the foregoing description, the operation and construction of the device will be apparent to those skilled in the art,

and it is to be understood that changes in the minor details of construction, arrangement and combination of parts may be resorted to, provided they fall within the spirit of the invention and the scope of the appended claims.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. A scarifying attachment for a mold board or scraping blade, comprising a U-shaped bracket, means on the rear of said mold board or scraping blade for securing said bracket thereto, a second U-shaped bracket secured to said first said bracket and extending forwardly thereof, means carried by said first said bracket for adjustably mounting a scarifying tooth thereon, and means carried by said second bracket for retaining said tooth on said mounting means.

2. The invention as in claim 1, wherein said first said U-shaped bracket is provided with a short leg and a long leg, and a sleeve is secured to the end of the short leg for mounting said bracket on the mounting means on the rear of said mold board and scraper blade.

3. The invention as in claim 1, wherein said first said U-shaped bracket is provided with a short leg and a long leg and said second U-shaped bracket is similarly formed and the long leg of said second U-shaped bracket is secured to the end of the long leg of said first said bracket and the short leg of said second bracket is secured to the face of the long leg of the said first said bracket.

4. The invention as in claim 1, wherein the means for adjustably securing the tooth to said first said bracket comprises a disc having spaced forwardly extending studs on the rear face thereof, which are adapted to be received in spaced openings in said first said bracket, and a transverse rib on the front face thereof which is adapted to be received in a similarly formed groove in said scarifying tooth and recesses in said tooth on the opposite side thereof are adapted to receive screws in said second of said brackets so that said screw can retain said tooth in any selective adjusted position with relation to said mold board or scraper blade.

CLIFFORD D. COOK.

No references cited.