UNITED STATES PATENT OFFICE

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SCRAPER AND BACKFILLING BLADE ATTACHMENT FOR TRACTORS

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1 Claim. (Cl. 37—153)

This invention relates to a scraper and backfilling blade attachment for tractors, wherein the scraper blade can be manually rotated into a position to scrape a given earth surface or to push dirt as when backfilling.

An object of my invention is to provide a novel scraper and backfilling attachment of the character stated, in which the scraper blade can be quickly and easily rotated by manual manipulation, thus enabling the operator to change the blade from a scraping to a pushing position, as desired.

Still another object of my invention is to provide a novel manually operable connection with the scraper blade, this manually operable connection or link being movable into a latched position when the blade is in either scraping or backfilling position.

A feature of my invention is to provide a novel control for a scraper blade, which is rapid in its operation and which does not require a forward or backward movement of the device itself or the tractor on which it is mounted, in order that the scraper blade may be actuated.

Other objects, advantages and features of invention may appear from the accompanying drawing, the subjoined detailed description and the appended claim.

In the drawing:

Figure 1 is a perspective view of my blade attachment on the tractor.

Figure 2 is a side elevation of my attachment with the blade in scraping position.

Figure 3 is a view similar to Figure 2, but with the blade in pushing or backfilling position.

Figure 4 is a view similar to Figure 3, but with the linkage locked so that the blade is held in backfilling position.

Figure 5 is a fragmentary transversal sectional view of the box beam and one of the scarifying blades therein.

Figure 6 is a view similar to Figure 5 showing the blade in its inoperative position.

Figure 7 is a sectional view taken on line 1—1 of Figure 2.

This application is an improvement in my co-pending application for Earth Moving Attachment for Tractors, Serial No. 770,288, filed on August 23, 1947.

Referring more particularly to the drawing, the usual power tractor 1 includes a rear shaft housing 2, to which are pivotally attached the draw bars 3—4. A turn buckle 5 is also attached to the axle housing of the tractor at one end and to the upper end of the A frame 6 of the scraping attachment 7. The scraping attachment 7 includes a box beam 8 which extends transversally behind the tractor 1.

A pair of ears 9—9 project from the beam 8 and the A frame 6 is fixedly attached to these ears. A plurality of scarifying fingers 10 are mounted in the beam 8, in a usual and well known manner, which may include the wedge 11. The fingers 10 can either project downwardly so as to engage the earth, or they can be reversed when the attachment is being used merely for scraping or backfilling purposes.

A mounting plate 12 is fixedly attached to each end of the beam 8 and these plates serve as a mounting means for the scraper blade 13 through the medium of side plates 16—17. The blade 13 includes discs 14—15, one on each end thereof, and these discs are pivotally mounted in side plates 16—17 respectively.

The side plates 16—17 are mounted on the mounting plates 12 and there may be provided a pair of bolts 18—19 which extend through the mounting plate and the side plates, and bolts 19 may be removed thus enabling the side plates 16—17 to pivot about bolts 18 on the mounting plates 12, enabling the blade 13 to be raised or lowered, as desired. This mounting method has been described in greater detail in my co-pending application above set forth.

The blade 13 is formed with two projecting lugs 20 and a lever arm 21 is pivotally secured to each of these lugs. A link 22 is pivotally mounted on one end to the arms 21, and at the other end to a post 22 which projects upwardly from the scraper frame. A handle 23 is fixedly secured to the upper edge of the arms 21 and projects forward towards the tractor 1. This attachment is by means of the block 24 which extends horizontally to engage the link 22 when latching the parts against accidental movement.

By lifting upwardly on the handle 23, the arm 21 will be swung upwardly, as shown in Figure 3, and at the same time will rotate the blade 13 to the position shown in Figure 3. By pressing the handle 23 downwardly again, the link 22 is pressed downwardly at an angle as shown at Figure 4, thus locking the arm 21 in position to hold the blade 13, as shown in Figure 4. If it is desired to return the blade to the position shown in Figure 2, the handle 23 is again lifted thus again causing the blade 13 to rotate, and after the blade is again in the position shown in Figure 2 the handle 23 is depressed, thus again locking the arm 21 in the position shown in Figure 2.
Briefly, the arms 21 and the link 22 form a toggle joint, which joint is moved out of alignment so that the forces on these members cannot cause the joint to move to the position shown in Figure 3 until the handle 23 is manually raised.

Having described my invention, I claim:

A scraper and backfilling blade attachment for tractors comprising a beam extending transversely of the tractor and at the rear of the same, a pair of fixed spaced ears on said beam, an A frame fixedly attached to the ears and rising above said beam, side plates fixed to each end of the beam, a scraper blade rotatably mounted in said side plates and between the same, a pair of spaced lugs on the scraper blade, a lever arm pivotally attached to each lug, a link pivotally secured at one end to both of the lever arms and at the other end to a post rising from said beam, a handle fixedly secured to the lever arms and a stop block extending laterally from the lever arms and engageable with said link to hold the lever arms and link against accidental displacement.

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The following references are of record in the file of this patent:

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