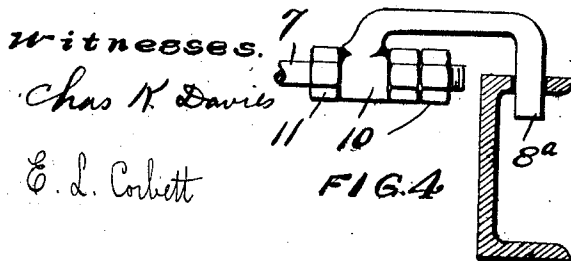
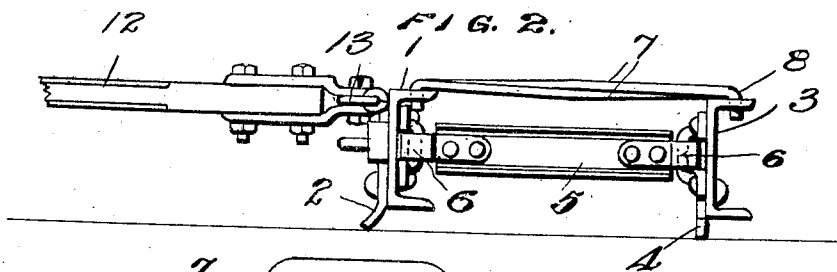
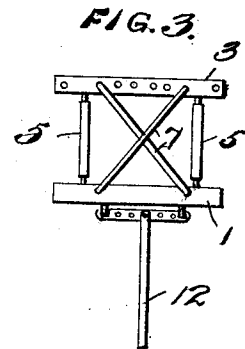
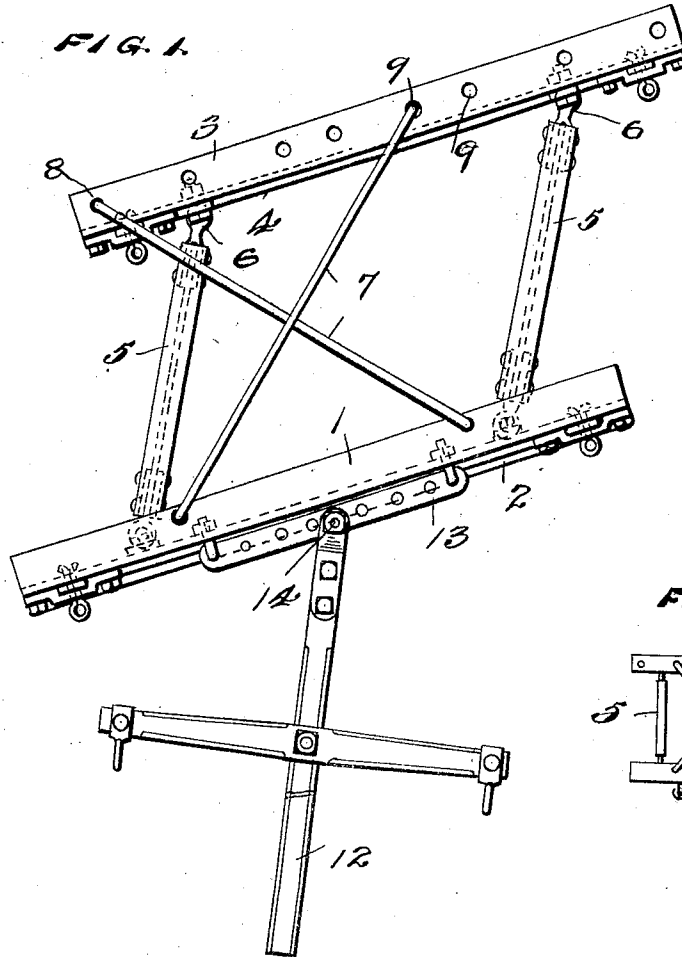


939,665.

C. H. CASNER.
ROAD SCRAPER.
APPLICATION FILED MAY 19, 1908.

Patented Nov. 9, 1909.



Witnesses.

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CYRUS H. CASNER, OF WILLIAMSPORT, PENNSYLVANIA

ROAD-SCRAPER.

939,665.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed May 19, 1908. Serial No. 433,726.

To all whom it may concern:

Be it known that I, CYRUS H. CASNER, a citizen of the United States, and resident of Williamsport, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in Road-Scrapers, of which the following is a specification.

My invention relates to scrapers for use in road making or repairing and for similar purposes.

More particularly it relates to means for changing the angle of the scraper blade or blades to the line of travel of the implement.

I generally prefer to employ a scraper having two blades, one carried behind the other and my invention is particularly adapted to this type of implement.

In using road scrapers in which the blades are arranged at an angle to the line of travel to throw scrapings to one side of the road, it frequently becomes desirable to go back over substantially the same path and at the same time to throw the earth in the same direction as previously. This cannot be done without changing the angle of the blades to throw the scrapings in the opposite direction with relation to the implement itself. I provide easily and quickly operated devices by which the position of the blades may be reversed and by which they may be securely retained in any position.

The invention also provides means for varying the angle of the blades when arranged to throw dirt either way.

I herein illustrate and describe the best form of the invention that I have up to the present time devised, but it is to be understood that this is only an exemplification and that the invention is capable of embodiment in other forms.

Figure 1 is a plan view. Fig. 2 is a side elevation. Fig. 3 is a plan view of reduced size showing the bars in another position, and Fig. 4 is a detail view of an adjustment for one of the braces.

Reference numeral 1 designates the front bar carrying a scraper blade 2 and numeral 3 the rear bar, carrying a blade 4. The bars may be of channel iron or of other suitable material or shape. The front and rear bars are connected by two or more links 5 secured to the bars by suitable pivot connections 6. The links are generally arranged so that the bars preserve a parallel relation in

all positions but in some cases the bars might be non-parallel.

The bars are retained in the desired relative position by one or more braces 7— usually two in number. The braces may be variously arranged but conveniently are pivoted to the front bar and are provided at their rear ends with hooks 8 or bolts adapted to enter holes 9 provided in the rear bar. To most efficiently secure the bars in position the braces are arranged at a different angle to the bars than that of the links. The braces are usually also crossed, as shown, in all positions of the bars. Holes 9 are of suitable number and are properly arranged to receive hooks 8 in each of the various positions in which it may be desired to place the bars.

The implement, as shown, is arranged for five positions. In Fig. 1, the bars are shown secured at quite a large angle to the line of movement of the implement as indicated by the direction of the pole. In this position the earth is thrown to the left in relation to the implement. By raising the braces the bars may be changed to a different angle to the line of movement and secured by replacing the hooks in the appropriate holes. Both bars may be secured at right angles to the line of movement if desired, as shown in Fig. 3.

In some cases it may be difficult to arrange holes 9 at exactly the right positions or the bars or braces may become somewhat distorted in use so that the hooks do not readily enter the holes. Also, the holes may be made somewhat larger than the hooks which would ordinarily permit some play. To obviate all of these difficulties the effective length of one of the braces may be made adjustable as shown in Fig. 4. This is done in the example shown by making the hook 8^a separated from the brace and providing it with a sleeve 10 which forms a sliding fit on the end of the brace bar. The end of the bar is threaded and nuts 11 serve to adjust the hook longitudinally on the bar and secure it in position.

It will be obvious that the position of the hook on the brace may be changed before it is inserted in its hole, or that after the hook is in position, the whole implement may be set up tight by turning nuts 11 in either direction, thus, taking up any play existing either in the links or in the braces. It will also be evident that if only one brace

is employed and this is provided with an adjustment such as shown in Fig. 4 in some cases this single brace will be sufficient.

The implement is provided with the usual pole 12 or other draft appliance. As shown, the front bar carries a perforated rail 13 to which the pole may be secured by bolt and nut 14 at different positions to vary the angle of draft of the implement. If necessary or desirable, means may be provided for holding the pole rigid in relation to the front bar.

I claim:

1. In a road scraper or similar implement, the combination of two scraper bars, links connecting the bars in parallel relation and a rigid brace connecting the bars to hold them in adjusted position.

2. In a road scraper or similar implement, two scraper bars, links connecting the bars in parallel relation, and a rigid extensible brace connecting the bars at a different angle from that of the links.

3. The combination of two scraper bars,

links pivotally connected to the bars serving to retain them in parallel relation and braces pivotally connected to one of the bars and adapted to readily engage and disengage the other bar so as to hold the bars in adjusted position.

4. The combination of two scraper bars, links pivotally connected to the bars serving to maintain the bars in parallel relation and rigid braces connecting the bars, one of the braces being provided with a longitudinally extensible adjustment.

5. The combination of two scraper bars, links pivotally connected to the bars and serving to retain them in parallel relation, crossed braces and means for connecting the braces to the bars in different positions so as to secure the bars in different relative positions.

CYRUS H. CASNER.

Witnesses:

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