H. S. WOOD.

COMBINED SCRAPER AND DRAG.

APPLICATION FILED JUNE 15, 1910.

984,634. Patented Feb. 21, 1911.

Fig. 1.

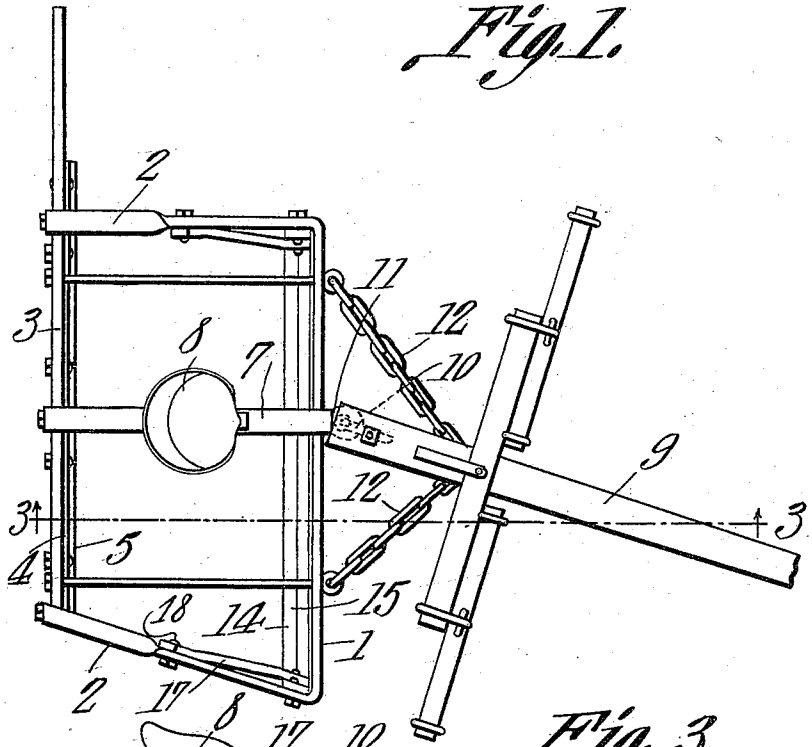


Fig. 3.

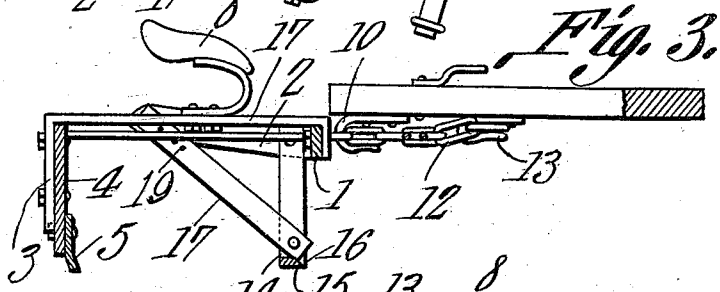
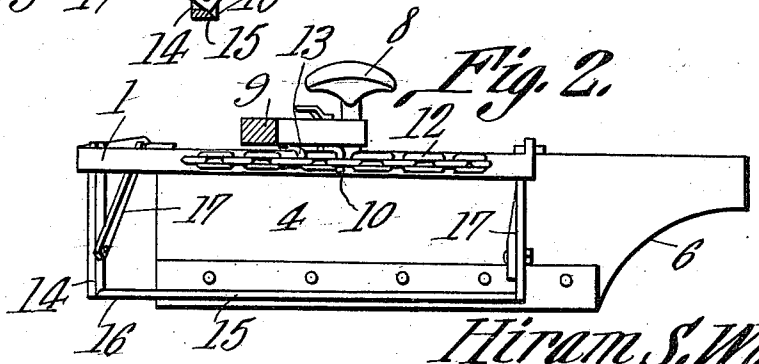


Fig. 2.



Witnesses

J. Dowling

A. Easterday

Hiram S. Wood,

Inventor

by C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

HIRAM S. WOOD, OF OSKALOOSA, IOWA.

COMBINED SCRAPER AND DRAG.

984,634. Specification of Letters Patent. Patented Feb. 21, 1911.

Application filed June 15, 1910. Serial No. 567,056.

To all whom it may concern:

Be it known that I, HIRAM S. WOOD, a citizen of the United States, residing at Oskaloosa, in the county of Mahaska and State of Iowa, have invented a new and useful Combined Scraper and Drag, of which the following is a specification.

This invention relates to a combined scraper and drag and consists in the novel construction and arrangement of its parts as hereinafter shown, described and claimed.

The object of the invention is to provide a combined implement as indicated, especially adapted to be used upon road surfaces, and with this object in view the construction includes a frame, to the forward portion of which is adjustably attached a scraping means and to the rear portion of which is attached a drag. The parts are so arranged that as the implement is drawn along the surface of the roadway the scraping means will engage the surface of the road and cut any lumps which may occur thereon away from the surface so as to render the surface approximately level or smooth and the material thus cut is engaged by the drag and may be carried along with the implement or worked off at the end of the drag as desired.

In the accompanying drawing:—Figure 1 is a top plan view of the drag and scraper. Fig. 2 is a front elevation of the same. Fig. 3 is a vertical sectional view of the same.

The combined scraper and drag consists of a frame formed from a bar 1 which is approximately U-shaped in plan but with one of its end portions at an acute angle to its intermediate portion and its other end portion at a right angle to its intermediate portion. The said bar is formed from a strip of material and its intermediate portion has its side of greatest transverse dimensions vertically disposed while the end portions of the bar are twisted at right angles as at 2 and the extremities of the ends are downwardly disposed as at 3. The drag element of the implement is supported by the extremities 3 of the bar 1 and consists of a cross piece 4 having a blade 5 attached to its lower edge portion. At one end portion the cross piece 4 projects beyond the end of the blade 5 and is cutaway at its lower portion as at 6. A strip 7 is supported at its forward end upon the intermediate portion of the bar 1 and at its rear end upon the intermediate portion of the cross piece 4 and an operator's seat 8 is mounted upon the said strip 7. The rear end of a draft tongue 9 is provided with a hook 10 which is adapted to engage an eye 11 formed at the forward end of the strip 7. A draft chain 12 is connected at its ends with the intermediate portion of the bar 1 and any one of the intermediate links of the said draft chain is adapted to be engaged with a hook 13 also mounted upon the draft tongue 9. Therefore it will be seen that by adjusting the links of the chain 12 in engagement with the hook 13 that the draft tongue 9 may be positioned at any desired angle to the intermediate portion of the bar 1.

The scraper consists of a U-shaped strip 14 which is attached at its ends to the forward intermediate portion of the bar 1 and which is provided with an intermediate approximately horizontal section 15 having a forwardly disposed cutting edge 16. The ends of the strips 14 are pivotally connected with the inner sides of the bar 1 and the braces 17 are pivotally connected at their lower ends with the lower portions of the strip 14. The rear ends of the braces 17 are adjustably connected with the intermediate portions of the end parts of the bar 1 by means of bolts 18 which are adapted to pass through registering perforations 19 and perforations provided in the end portions of the bar 1.

From the above description it will be seen that when the implement is drawn along the surface of a road, the cutting edge 16 of the intermediate portion 15 of the scraper 14 will engage protrusions at the surface of the road and cut the same from the general surface. The material thus removed will fall back over the intermediate portion of the scraper 14 and will be caught by the blade 5 carried by the cross piece 4. The material thus collected may be carried to any convenient point and by backing or turning the implement the said material is freed from the blade 5 and is left upon the surface of the road in a pile. Or by adjusting the intermediate link of the draft chain 12 in the hook 13 the draft tongue 9 may be pitched at any desired angle to the vertical plane of the cross piece 4 and thus as the implement is drawn along the road

and the material is engaged by the blade 5, the said material will work off at the end of the blade and under the cut-away portion 6 at the end of the cross piece 4. Thus the material may be left in a windrow upon the surface of the road. At other times should it be desired that the cutting edge 16 of the intermediate portion 15 of the scraper 14 should penetrate to any considerable extent below the surface of the road, the braces 17 may be shifted longitudinally whereby the intermediate portion 15 of the said scraper 14 will be pitched at an angle to the surface of the road and this will cause the cutting edge 16 of the portion 15 to penetrate below the surface and loosen the entire upper strata thereof. The material thus loosened is collected in the manner above set forth and may be conveyed to any convenient point and deposited in a pile or windrow.

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

In a combined scraper and drag, a frame consisting of a bar formed approximately U-shaped in plan and having the edges of its intermediate portions vertically disposed, the side portions of the frame bar being twisted so that the edges of the rear portions of the said frame are horizontally disposed, the side portions of the frame bar having downturned extremities, a drag attached to the down turned extremities of the bar, a scraper mounted pivotally upon the forward portion of the frame and means for holding the scraper in an adjusted position.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature is the presence of two witnesses.

HIRAM S. WOOD.

Witnesses:

JEROME B. WOOD,

NELSON J. COOK.