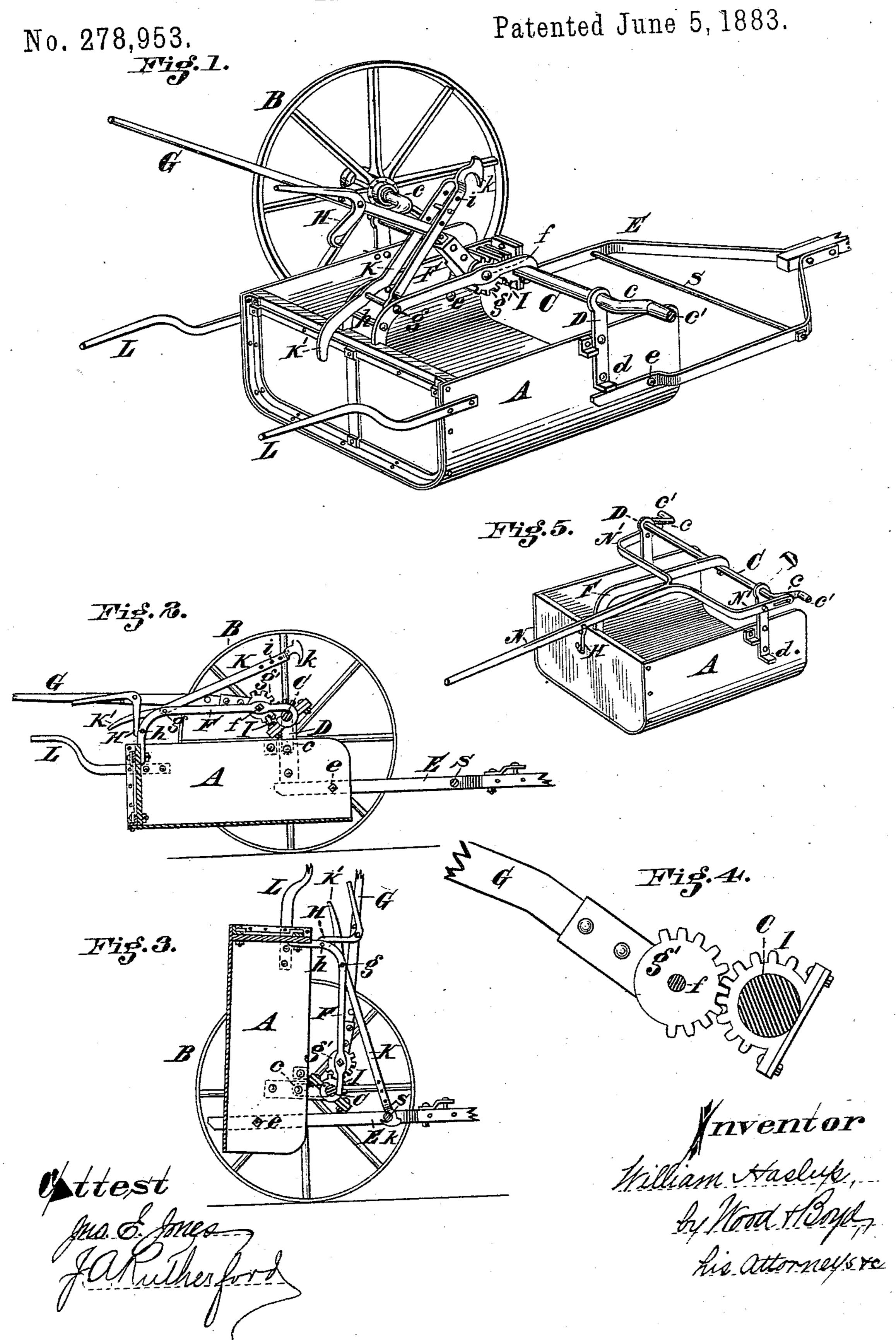
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EARTH SCRAPER.



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EARTH-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 278,953, dated June 5, 1883.

Application filed September 12, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HASLUP, a citizen of the United States, and a resident of Sidney, in the county of Shelby and State of 5 Ohio, have invented certain new and useful Improvements in Earth-Scrapers, of which the following is a specification.

My invention relates to a two-wheeled earth-

scraper.

The object of my invention is, first, to employ an oscillating crank-axle, on which the supporting ground-wheels journal, and upon the oscillating arms of which axle the scraper is suspended, with lever-connections of the 15 scraper with the crank-axle for raising, lowering, or tilting the scraper by oscillating the axle.

Other objects of my invention will be fully explained in the description of the accompany-

20 ing drawings, in which—

Figure 1 is a perspective view of my invention, showing the scraper lowered to rest on the ground, ready for scraping. Fig. 2 is a central longitudinal vertical section of the same 25 in position for hauling a load. Fig. 3 is a similar sectional view, showing the scraper in position when elevated to dump a load. Fig. 4 is a detailed view of the rack and lever devices. Fig. 5 is a perspective view of a modified form 30 of lever devices.

A represents the body of an earth-scraper; B, the ground or supporting wheels; C, a crankaxle; c, the crank or bent ends, and c' the spindles on which the wheels journal.

D D represent ears bolted firmly to the sides of the scraper, and pierced with holes, through which pass the shaft or oscillating part of the crank-axle, so as to pivot the scraper to the axle.

E represents a draw-bail; e, pivot-bolts con-

necting it to body A of the scraper.

d represents a stop, preferably formed by bending up the lower end of ears D, and against which the projecting ends of the forked bail-45 hounds Estrike to act as stops and hold the

scraper level when loaded.

F represents a coupling-reach bolted to the end of the scraper and extending forward and swiveling around the oscillating shaft of the 50 axle C. It is shown made of two parts, with an open space between the parts, so as to af-

ford a firm support for the lifting and tilting lever G, which is journaled in the open or slotted portion of the reach.

G represents the tilting-lever, having on its 55 front end a segment of gear, y', and pivoted to

reach F by bolt f.

I represents a segmental gear keyed or firmly attached to the arm of axle C, and meshing with gear of tilting-lever G. The preferred 60 form of constructing and attaching these gears is shown in Fig. 4.

H represents a catch engaging over bolt h to lock the lever to hold the scraper-body A in

position for carrying or dumping.

K represents a coupling-arm pivotally mounted on bolt g. It is shown made of two parallel limbs united at the front end, and with a hook, k, at its forward end, which engages on the brace-rod S to hold the scraper in a ver- 70 tical position, as shown in Fig. 3. The fork or throat of the slot or opening in the arm K acts as a stop to limit the forward movement of the lever G and the backward movement of the crank-arms c, thus regulating the furrow 75 or cut of the scraper.

i represents pin-holes pierced through the arms K, through which a pin may be inserted to regulate the point of stop or movement of lever G.

K' represents an extension of one of the arms K for releasing or engaging the hook k.

L represents handles bolted to the sides of the scraper A. In practice only one will be used, as the scraper is mainly manipulated by 85 means of lever G, handle L being used as an auxiliary thereto, and may in many instances be dispensed with entirely. When the scraper is in the position shown in Figs. 2 and 3 the lever G rests on bolt g, which acts as a back stop to 90. the movement of said lever.

Fig. 5 shows a modified form of lever-connections of the oscillating axle with the scraperbody A for raising, lowering, or dumping the same.

N represents a forked lever pivoted at the front ends of the fork N' to the ends of the crankarms c, the fork N' being slotted, as shown, and also pivoted to the ears D, which act as fulcra for the lever to oscillate the arms c and to raise 100 or lower the scraper A. With the tilting or oscillating lever attached as thus shown, the

scraper is manipulated by the reverse motion of the lever to that shown in the other figures herein.

The first two clauses of claims herein are not limited to the specific lever devices and the modes of connecting and securing the same, and many other equivalent modifications may be made therein and still embody some of the most important features of my invention. These specific features are made the subject of additional clauses of claims.

The scraper is operated in the following manner: The lever G is elevated as shown in Fig. 1, which movement carries the crank-arms c15 forward and upward, and, advancing the wheels B, thus lowers the scraper A till it rests on the ground. The scraper may be tilted in position for filling by lifting on the lever G or on one of the handles L. When the scraper is 20 filled, the lever G is brought down and locked in place, as shown in Fig. 2. When the load is to be dumped, lever G, locked to the body A, is elevated, the front point of the scraper catches the ground, when the draft of the team 25 will assist in bringing the scraper into the position shown in Fig. 3, and the load is fully dumped. The scraper then may be returned to the position shown in Fig. 1 or Fig. 2, as desired.

1. An earth-scraper suspended on two wheels by means of an oscillating crank-axle to which the scraper is swiveled, and having a reach connecting the bail of the axle with the end board

of the scraper, upon which reach the tiltinglever is fulcrumed, substantially as herein set forth.

2. An earth-scraper suspended on a crank-

axle and supporting-wheels by means of the ears D and reach F, attached to the rear end of 40 the scraper and swiveling upon the arm of the oscillating axle C, substantially as herein set forth.

3. An earth-scraper suspended and journaled upon a crank-axle by means of the ears D and 45 reach F, in combination with a lever, G, fulcrumed on said reach and connected to the axle, so that the scraper may be raised, lowered, or tilted by said lever, substantially as herein set forth.

4. An earth-scraper suspended on an oscillating crank-axle, C, and reach F, connecting the rear end of the scraper to the axial shaft, in combination with lever G, pivoted to said reach, and provided with rack devices on said 55 axis and lever for oscillating the axial shaft, substantially as herein set forth.

5. In an earth-scraper having an oscillating crank-axle on which the scraper is suspended, a reach connecting the rear end of the scraper 60 to the axle and an oscillating lever, G, fulcrumed thereon, in combination with a slotted stoppingarm, K, substantially as herein set forth.

6. In an earth-scraper, the suspending-reach F, and lever G, fulcrumed thereon, in combination with the oscillating arm K, acting as a stop for the lever G, and having a hook for securing the scraper in a vertical position, substantially as herein set forth.

In testimony whereof I have hereunto set my 70 hand in the presence of two subscribing witnesses.

WILLIAM HASLUP.

Witnesses:

W. D. DAVIS, H. THOMPSON.