

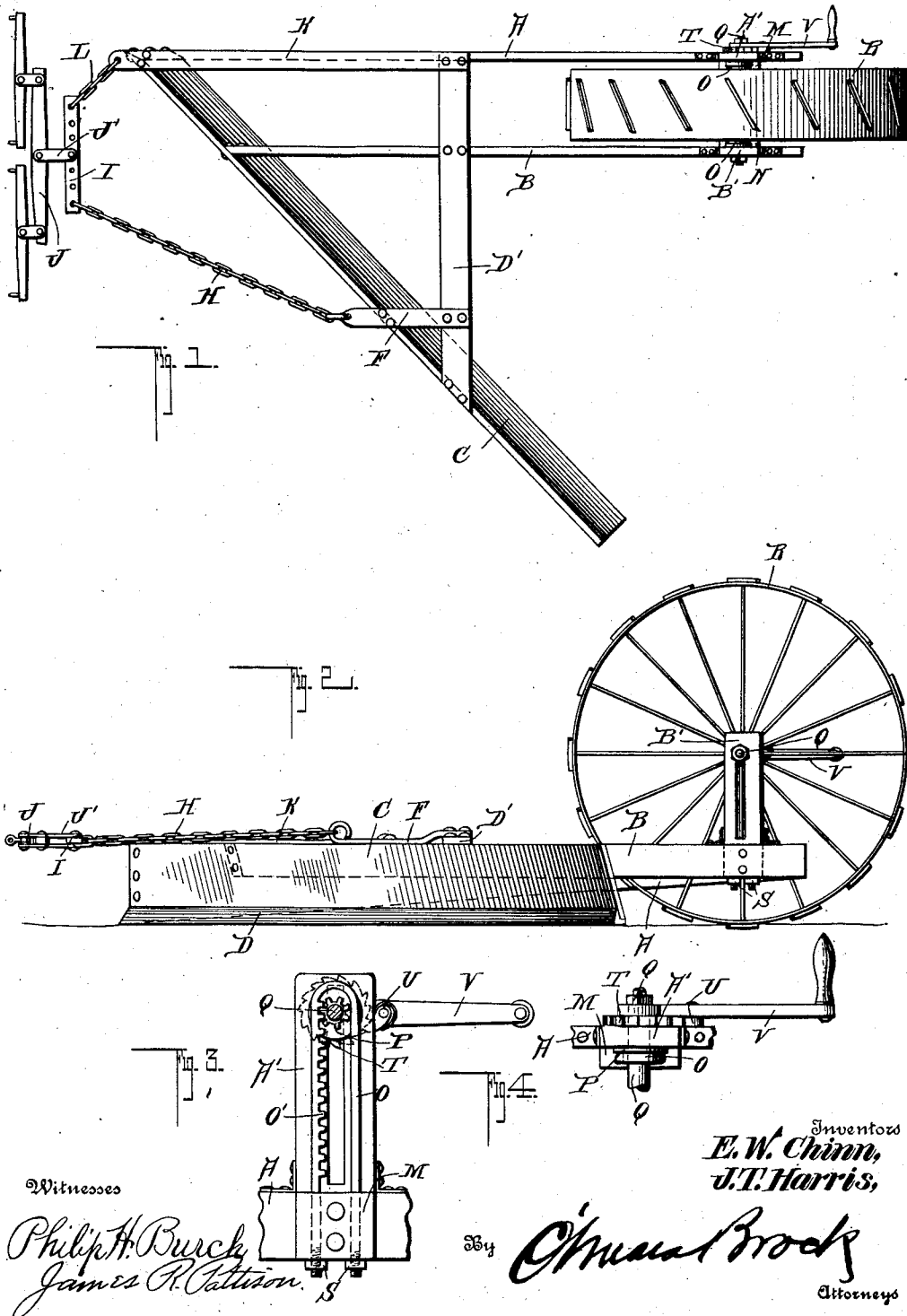
E. W. CHINN & J. T. HARRIS.

ROAD SCRAPER.

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1,023,068.

Patented Apr. 9, 1912.



Witnesses

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ERLE W. CHINN AND JOSEPH T. HARRIS, OF COLUMBIA, MISSOURI.

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1,023,068.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, ERLE W. CHINN and JOSEPH T. HARRIS, citizens of the United States, residing at Columbia, in the county of Boone and State of Missouri, have invented a new and useful Improvement in Road-Scrapers, of which the following is a specification.

This invention relates to road scrapers, the object being to provide a road scraper which is exceedingly simple and cheap in construction and one which is very effective in use.

A still further object of the invention is to provide a road scraper having an oblique blade carried by a frame which is adjustably supported by a wheel whereby the same can be raised or lowered.

A still further object of the invention is to provide a road scraper which is so constructed that the frame is so mounted upon the wheel that it can be easily and quickly adjusted vertically so as to raise or lower the same whereby the scraper blade can be elevated in such a manner that it will only engage the upper surface of a road whereby the loose dirt will only be removed without injuring the road in any way.

A still further object of the invention is to provide a draft equalizer in connection with the scraper whereby an even pull can be obtained so as to prevent side draft.

With these objects in view, the invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a top plan view of our improved road scraper. Fig. 2 is a side elevation. Fig. 3 is a detail side elevation, a portion of the frame being shown and the manner of supporting the same from the axle of the wheel. Fig. 4 is a detail top plan view of Fig. 3.

In carrying out our improved invention, we employ a pair of parallel bars A and B to the forward ends of which is connected a scraping blade C which extends therefrom at an acute angle, the blade being inclined rearwardly and having a scraping shoe D secured to its lower edge so as to prevent the same from wearing out and this blade can be formed of any suitable metal but we prefer to use a wooden blade with a shoe

as described, which enables the device to be manufactured cheaper. Extending transversely of the bars A and B is a cross-bar D' which is connected to the blade C and has a brace F connected thereto which extends out beyond the blade C provided with a chain H which is connected to one end of a bar I which is provided with a plurality of apertures in which is adapted to be secured the connecting member J' of a double-tree J to which can be connected a pair of horses for drawing the scraper, the other end of the bar I being connected to a brace K by a chain L.

Secured to the inner faces of the parallel bars A and B adjacent their rear ends are blocks M and N provided with spaced vertical bores through which extend the threaded ends of U-shaped clips O which straddle pinions P secured on an axle Q which extends transversely through uprights A' and B' secured on the upper edges of the parallel bars A and B by angle irons as clearly shown. Mounted on the axle Q is a wheel R which is provided with a wide rim having diagonal cleats for preventing the same from slipping sidewise, said cleats also serving the purpose of engaging the ground for preventing the wheel from slipping in any way. The lower ends of the U-shaped clips O are provided with nuts S securely locking the clips in position within the blocks M and N and it will be seen that by mounting the clips in this manner their positions with respect to the side bars can be adjusted. The clips O are provided with rack portions O' adapted to mesh with the pinions P of the axle Q so that when the axle is rotated the bars A and B can be raised and lowered as desired so as to raise and lower the scraping blade and it will be seen that as the rear ends of the bars are raised the angle of the scraping blade is changed with respect to the ground so as to cause the same to only scrape the upper surface. For revolving the axle Q we secure on the same adjacent the upright A a ratchet wheel T which is adapted to be engaged by a spring pawl U carried by a crank handle V which is loosely mounted on the axle and held in position thereon by a nut Q' and it will be seen that for operating the crank handle the axle will be rotated so as to cause the rack portions of the U-shaped clips O to travel over the same which will raise and lower the scraper.

It will be seen that by this arrangement the bars can be easily and quickly raised or lowered so as to change the position of the blade and it will be seen that by having a clip arranged to each side of the wheel the axle can be held in a horizontal position as the clips can be adjusted by operating the nuts S.

The scraper can be used without the wheel if desired but we have found by experimenting that better results can be obtained when the scraper is supported with a wheel as set forth.

While we have only shown and described one blade on the scraper it is of course understood that a second blade can be attached when the cutting is to be increased.

From the foregoing description it will be seen that we have provided a road scraper which is so constructed that the scraping blade can be adjusted by adjusting the position of the frame carrying the same with respect to the axle of the wheel so as to cause the blade to scrape any amount of the surface of the road off without injuring the road in any way.

What we claim is:—

1. A road scraper comprising a pair of parallel bars having a scraping blade extending at an acute angle therefrom, blocks secured to the rear ends of said bars, clips secured in said blocks, provided with rack portions, uprights carried by said bars, an axle mounted in said uprights carrying a wheel, pinions fixed on said axle meshing with the rack portions of the clips and means for operating said axle.

2. A road scraper comprising a pair of bars, a scraping blade connected to said bars and extending therefrom, at an acute angle, clips carried by said bars and having rack portions, an axle, pinions mounted on the axle and adapted to engage said rack portions, and a wheel mounted upon said axle.

3. A road scraper comprising a pair of parallel bars having a scraping blade extending at an acute angle therefrom clips carried by said bars provided with rack portions, uprights carried by said bars, an axle mounted in said uprights carrying a wheel, pinions fixed on said axle meshing with the

rack portions of the clips and means for revolving said axle.

4. A road scraper comprising a frame carrying a scraping blade, uprights carried by said frame, an axle loosely mounted in said uprights carrying a wheel, pinions fixed on said axle, clips provided with rack portions meshing with said pinions and a pawl and ratchet mechanism for turning said axle.

5. A road scraper comprising a pair of parallel bars having a scraping blade extending therefrom at an acute angle, a cross bar connecting said bars and blade, braces connected to the said cross bar and blade, chains carried by said braces, a bar connected to said chains, a double-tree adjustably mounted on said bar and a wheel for supporting the rear ends of said bars together with means for adjusting said bars with respect to the axle of the wheel.

6. A road scraper comprising a pair of parallel bars having a scraping blade extending from their forward ends at an acute angle, said blade being provided with a shoe at its lower edge, blocks secured to the inner faces of said bars adjacent their rear ends provided with parallel bores, U-shaped clips adjustably mounted in said bores provided with rack portions, nuts for adjusting the position of said clips within said bores, slotted uprights carried by said bars, an axle mounted in said uprights provided with pinions meshing with the rack portions of the clips, a wheel loosely mounted on said axle and a crank for operating said axle.

7. A road scraper comprising a frame carrying a scraping blade, slotted uprights carried by said frame, an axle mounted in said uprights provided with a wheel, pinions secured on said axle, clips carried by said frame provided with rack portions meshing with said pinions, a ratchet fixed on said axle and a crank loosely mounted on said axle carrying a pawl for engaging said ratchet.

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