F. M. SETTLE.

ROAD DRAG.

APPLICATION FILED APR. 24, 1916.

1,223,625. Patented Apr. 24, 1917.

Fig. 1.

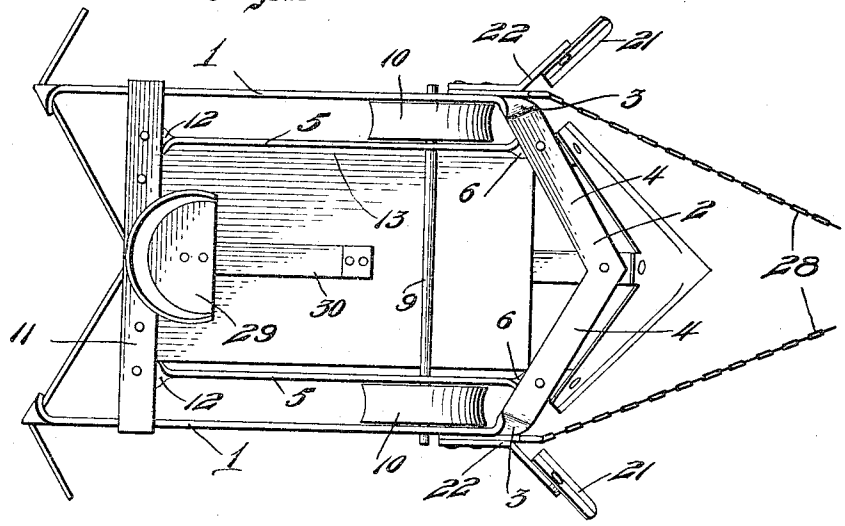


Fig. 2.

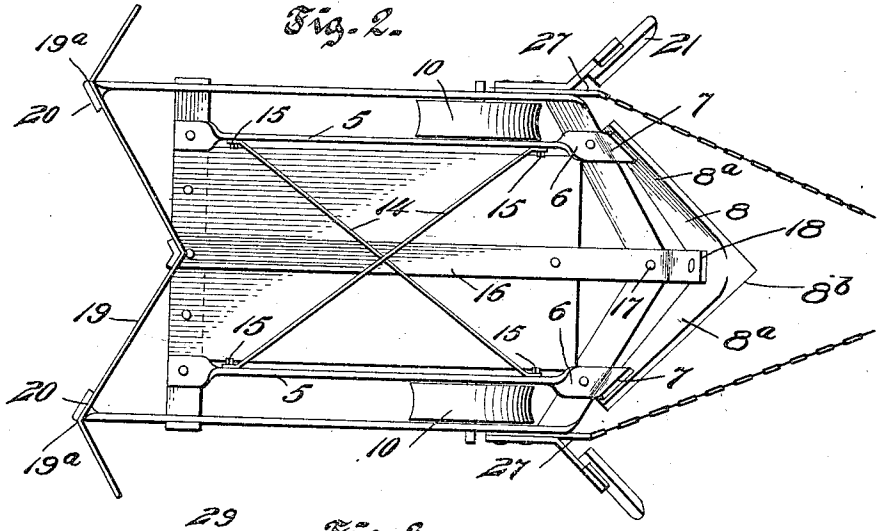
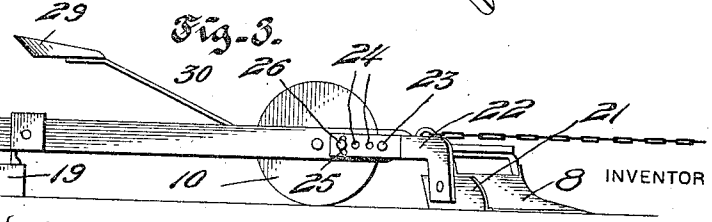


Fig. 3.



WITNESSES

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ROAD-DRAG.

1,223,625. Specification of Letters Patent. Patented Apr. 24, 1917.

Application filed April 24, 1916. Serial No. 93,235.

To all whom it may concern:

Be it known that I, FRANCIS M. SETTLE, a citizen of the United States, residing at Wynnewood, in the county of Garvin and State of Oklahoma, have invented certain new and useful Improvements in Road-Drags, of which the following is a specification.

This invention has relation to road drags, and the nature and objects thereof will be readily apparent to those skilled in the art to which it appertains, in the light of the following explanation of the accompanying drawings illustrating what I now believe to be the preferred embodiment, or mechanical expression of my invention from among other forms and arrangements within the spirit of the invention and the scope of the appended claims.

However, an object of the invention is to provide a road drag having a scraping plow for removing irregularities on the surface of a road bed in a novel manner.

Another object of the invention is to provide a road drag having a plow of the character described, and a leveling scraper whereby depressions in the road bed may be filled to the uniform level with the material removed by the aforesaid plow.

In addition to the foregoing my invention comprehends improvements in the details of construction and arrangement of parts to be hereinafter described and particularly pointed out in the appended claims.

In the accompanying drawings in which similar and corresponding parts are designated by the same characters of reference throughout the several views in which they appear, Figure 1 is a view in top plan of a road drag constructed after the manner of my invention,

Fig. 2, is a bottom plan thereof, and

Fig. 3, is a view thereof in side elevation.

With reference to the drawings 1 indicates side frame members, preferably formed of strap iron and having a horizontally flattened portion 2 formed by bending the frame members at 3 and comprising forwardly converging portions 4. Auxiliary frame members 5 are provided in spaced relation to the members 1 and are flattened at their forward ends indicated at 6, and having downturned extremities 7 for the support of a scraping plow 8. A shaft 9, is extended transversely of the frame and is journaled for rotation in apertures in the frame members 1 and 5. Ground wheels 10 are mounted upon the shaft in the spaces between the said frame members.

A transverse bar 11 is secured to the flattened portions 12 on the rear ends of the frame members 5 and is adapted to rest its ends upon the frame members 1. A platform 13 is secured to the bar 11 at its rear edge, and its forward edge is supported upon the portions 6 of the frame members 5. Diagonal braces 14 are also provided on the under side of the platform with their ends secured to the inner frame members as at 15. A longitudinally extending bar 16 is provided beneath the platform and is secured at its rear end to the transverse bar 11, and at its forward end to the forwardly extending portion 2 of the outer frame members as at 17, and is furthermore provided with a downwardly extended terminal 18 to which the plow 8 is secured. The plow 8 is formed of rearwardly diverging portions 8^a, and a horizontal edge 8^b which engages the surface of the road bed.

A leveling scraper 19 is provided which is horizontally undulating in configuration and is secured at 20 to the rear twisted terminals of the frame members 1, and at its intermediate portion to the rear end of the longitudinal bar 16. Side scrapers 21 are also provided at the forward end of the machine and are secured to supporting arms 22 pivoted at 23 to the frame members 1 so as to dispose the scrapers in an outwardly and forwardly diverging position with the rear ends of said scrapers in proximity to and spaced from the rear ends of the plow arms 8^a. The arms 22 for supporting the scrapers are rearwardly extended and provided with apertures 24 for adjustably pivoting the same, and arcuate slots 25 in which are seated bolts 26 extending from the frame members 1, whereby said arms 22 may be adjustably rotated about their pivots, and secured against movement subsequent to said adjustment for varying the cutting depth of the scrapers.

Bars 27 are provided and are disposed between the frame members 1, and the scraper arms 22, to be held by the bolts passing therethrough and described above. Chains 28 are secured to the arms 27 affording means for connection to a tractive element for moving the drag along the road. A seat 29 is also provided having a support 30 bolted or otherwise secured to the platform.

It is to be noted that the spaces between the ends 8^a, of the plow and the ends of the scraper blades 21, are in longitudinal alinement with rearwardly extending undulations 19^a of the leveling scraper 19. Therefore when the drag is in use the projections of the road bed are razed and the debris resulting from such an operation is directed toward the spaces between the plow arms and scrapers mentioned above in the form of longitudinal ridges of earth which are subsequently caught in the rearwardly extending undulations 19^a of the leveling scraper, the earth being then spread by said scraper so as to fill depressions in the road bed and form a uniform level surface.

Thus it will be seen that I have provided a road drag which is simple in its construction and includes novel features not heretofore provided in machines of this character. Various ways of constructing my invention will occur to those skilled in the mechanical arts, and I therefore desire to reserve the right and privilege of changing the form of the details, and otherwise altering the arrangement of parts without departing from the spirit of the invention or the scope of the appended claims.

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

1. A road drag having a road scraper at its forward end and a horizontally undulating leveling scraper at its rear end, the terminals of the road scraper being disposed in longitudinal alinement with rearwardly extending undulations of the rear leveling scraper.

2. A road drag having a road scraper at its forward end, side scrapers disposed with their adjacent ends in spaced proximity to the ends of the scraper, and a horizontally undulating leveling scraper at its rear end disposed with rearwardly extending undulations in longitudinal alinement with the aforesaid spaces between the scrapers.

3. A road drag having a pointed road scraper at its forward end formed with rearwardly diverging arms, cutting edges extending from the point along the arms, side scrapers forwardly diverging with their adjacent ends in spaced proximity to the rear ends of the road scraper, and a rear horizontally undulating leveling scraper disposed with rearwardly extending undulations in longitudinal alinement with the aforesaid spaces between the scrapers.

4. A road drag including longitudinal frame members having a forwardly extending transverse connecting portion, inner longitudinal frame members having downwardly extending forward portions and secured adjacent said portions to the transverse frame portion, said inner and outer frame members being disposed in transverse spaced relation, a transverse shaft journaled in the frame members, supporting wheels mounted on the shaft and disposed in the aforesaid spaces, a road scraper mounted on the downwardly extended portions of the inner frame members, a central longitudinal bar having a down-turned forward terminal for connection to the road scraper and the transverse frame portion, forwardly diverging side scrapers mounted on the outer frame members, and a leveling scraper mounted upon the rear terminals of the outer frame members and the central longitudinal bar.

5. A road drag including a frame, a road scraper at its forward end, side scrapers forwardly diverging and mounted in spaced proximity to the ends of the road scraper, arms for supporting the side scrapers adjustably pivoted to the frame, and means for securing the arms against movement subsequent to said adjustment.

6. A road drag including a frame, a road scraper at its forward end, forwardly diverging side scraper blades mounted with their adjacent ends in spaced proximity to the ends of the scraper, arms pivotally mounted upon the frame for supporting the side scraper blades and to afford vertical adjustment of the blades, and having arcuate slots, bolts on the frame extending through the slots whereby they may be tightened to secure the arms against movement subsequent to said adjustment.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS M. SETTLE.

Witnesses:
S. M. BARRETT,
W. D. DAUGHERTY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."