

L. D. CRAIG.
ROAD CUTTER OR THE LIKE.

APPLICATION FILED MAY 12, 1910. RENEWED JUNE 12, 1912.

1,050,003.

Patented Jan. 7, 1913.

Fig. 1.

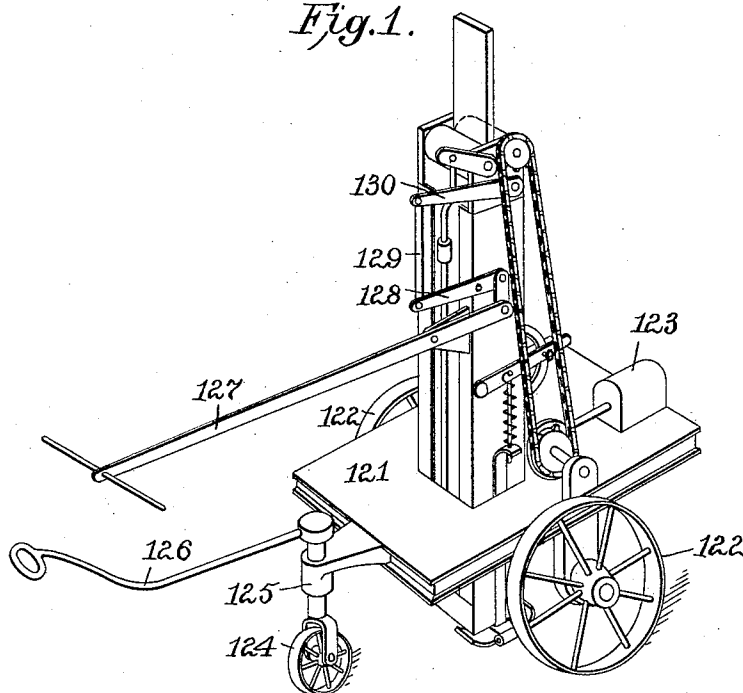
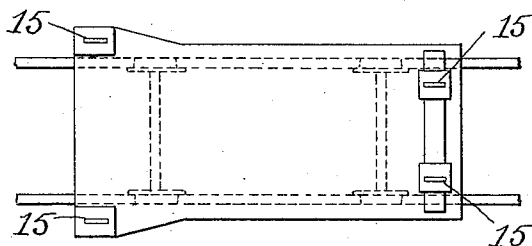


Fig. 2.



Attest:

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UNITED STATES PATENT OFFICE.

LEE D. CRAIG, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO NATIONAL TRENCHING MACHINE COMPANY, OF WASHINGTON, DISTRICT OF COLUMBIA, A CORPORATION OF DELAWARE.

ROAD-CUTTER OR THE LIKE.

1,050,003.

Specification of Letters Patent.

Patented Jan. 7, 1913.

Original application filed December 14, 1909, Serial No. 533,063. Divided and this application filed May 12, 1910, Serial No. 561,005. Renewed June 12, 1912. Serial No. 703,327.

To all whom it may concern:

Be it known that I, LEE D. CRAIG, citizen of the United States, residing at San Francisco, California, have invented certain new and useful Improvements in Road-Cutters or the Like, of which the following is a specification.

My invention relates to apparatus for cutting roadbeds, and particularly for cutting asphalt for making patches or repairs in the surface of the roadway, and also for cutting asphalt and concrete along the rails of street railways.

This application is a division of that filed by me on Dec. 14, 1909, Serial No. 533,063.

In the accompanying drawings: Figure 1 is a perspective view of one form of my invention, and Fig. 2 is a plan view of that form of my invention adapted to do cutting along the tracks of railways.

In making patches in the asphalt surface, it is necessary to cut irregular figures along lines marked out by the man in charge of the work, and the form of apparatus now to be described is designed to be moved along the irregular lines to do the cutting for making patches in the surface. For this purpose a platform of frame 121 is supported upon carrying wheels 122, and the frame carries at a point substantially between the carrying wheels a single guide frame for guiding a weighted cutter, said guide frame, together with the weighted cutter, the pressure shoe and the lifting rolls, together with the drive connections leading thereto from the engine 123, being all substantially similar to the devices described in the application above mentioned, of which this is a division. In order to steer this small machine, a caster wheel 124 is swiveled in a bracket 125, and is connected with a handle 126 by which the truck may be readily turned, and by which also the truck may be drawn along by hand. One attendant may do the steering, the hand propelling and the controlling of the cutter, for which purpose a hand lever 127 exemplifies any suitable connection or connections whereby the attendant on the ground at the steering handle may control the cutting. This lever 127 connects through the lever 128, link 129 and lever 130 with the clutch for controlling the cutter. This form of the apparatus may be arranged to deliver the same number of blows per minute as in the

large machine adapted to do trench work, though its cutting blade may be of less length than that employed in the trenching apparatus, it being understood, however, that the rise and fall of the cutter will go on automatically so long as the attendant desires this to be done. When, however, he desires to move the machine, he can arrest the operation of the cutter by operating the lever 127, and then draw the machine and turn it, if necessary, to get the cutter in position for the next cutting action. It will be observed that by having the cutter arranged substantially between the carrying wheels 122, and approximately in the same vertical plane with the axis thereof, the machine may be made to turn sharp curves or corners in following the irregular lines necessary for patch work. In other words, the cutter is arranged in such a relation to the carrying wheels that it forms practically the point about which the truck may be turned without giving the truck any advance movement.

As shown diagrammatically in Fig. 2, I may employ my machine for cutting the asphalt and concrete alongside the car tracks, and for this purpose I employ a car having wheels to run on the tracks and having cutting mechanism substantially like that above described, including cutters arranged at the proper distance from the rails to make the cut. I show a pair of cutters 15 at one end of the machine for cutting the material along the inner sides of the rail, and at the other end of the machine I show another pair of cutters 15 for cutting the material along the outer sides of the rail. The machine may be propelled from the electric power furnished the railway, and the cutting mechanism may be operated from an electric motor mounted on the truck or platform to which current is supplied from the electrical conductor of the railway.

I claim:—

1. A road cutting machine having a portable carriage, steering means therefor, a vertically operating cutter mounted thereon, with means for operating the same, and controlling means for the cutter extending to a point for manipulation by the operator on the ground, substantially as described.
2. A road cutting machine having a carriage with a vertically operated cutting tool mounted thereon, means for operating the

cutters, a steering and propelling handle for the carriage, and a controller extending to near the handle for operation by the attendant on the ground.

- 5 3. A machine for cutting irregular shapes in asphalt and the like for patchwork, consisting in a portable carriage including a frame and carrying wheels, a cutter arranged at a point substantially between the carry-
10 ing wheels at approximately the point about

which the carriage can be turned with least traveling movement, substantially as described.

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

LEE D. CRAIG.

Witnesses:

CHAS. F. BYRNE,

E. W. MIDDLETON.

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