

Dec. 27, 1927.

W. G. PROCTOR ET AL

1,654,014

ROAD TAMPER

Filed July 2, 1926

3 Sheets-Sheet 1

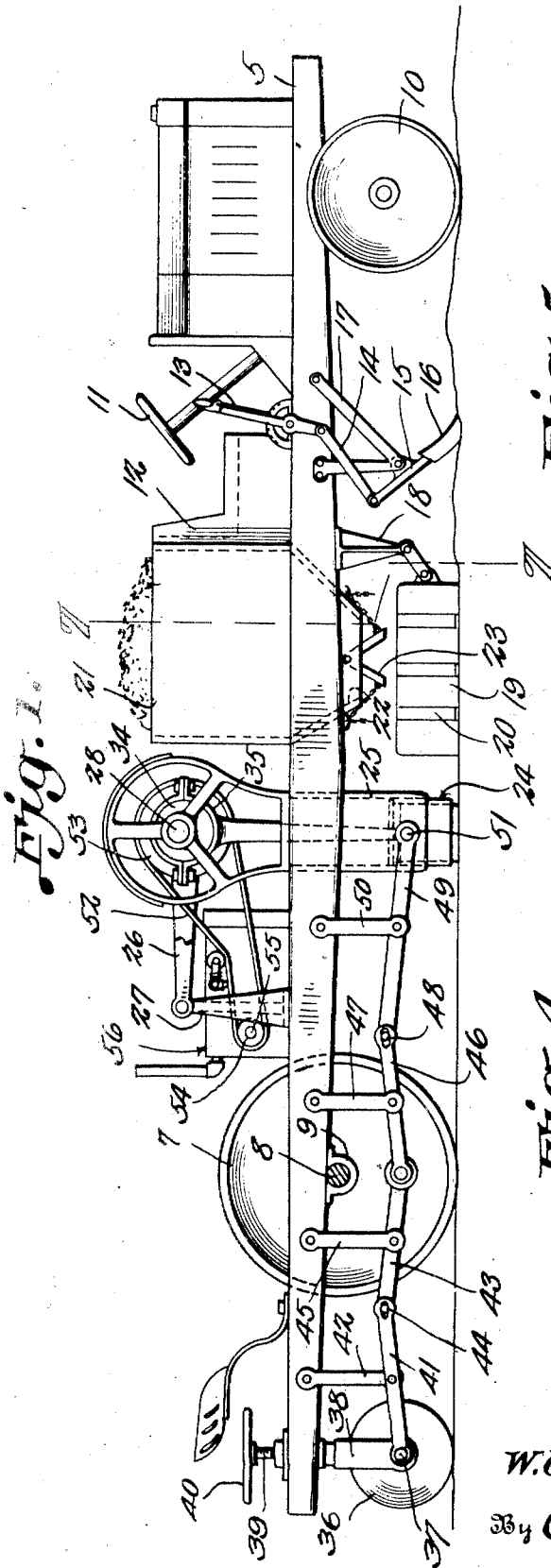


Fig. 5.

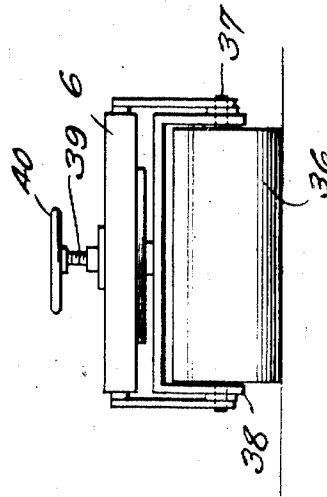
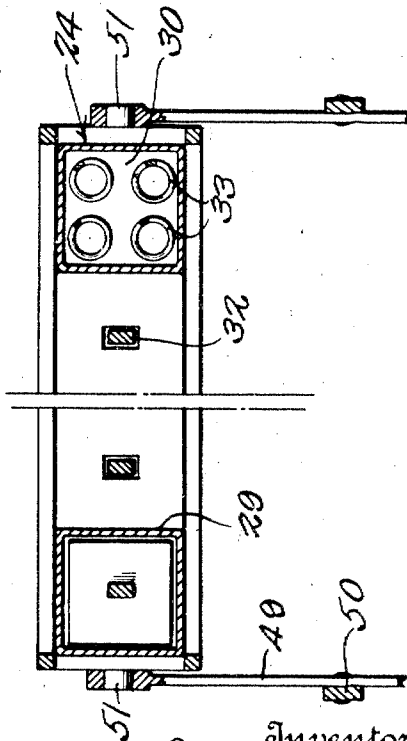


Fig. 4.



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Fig. 3.

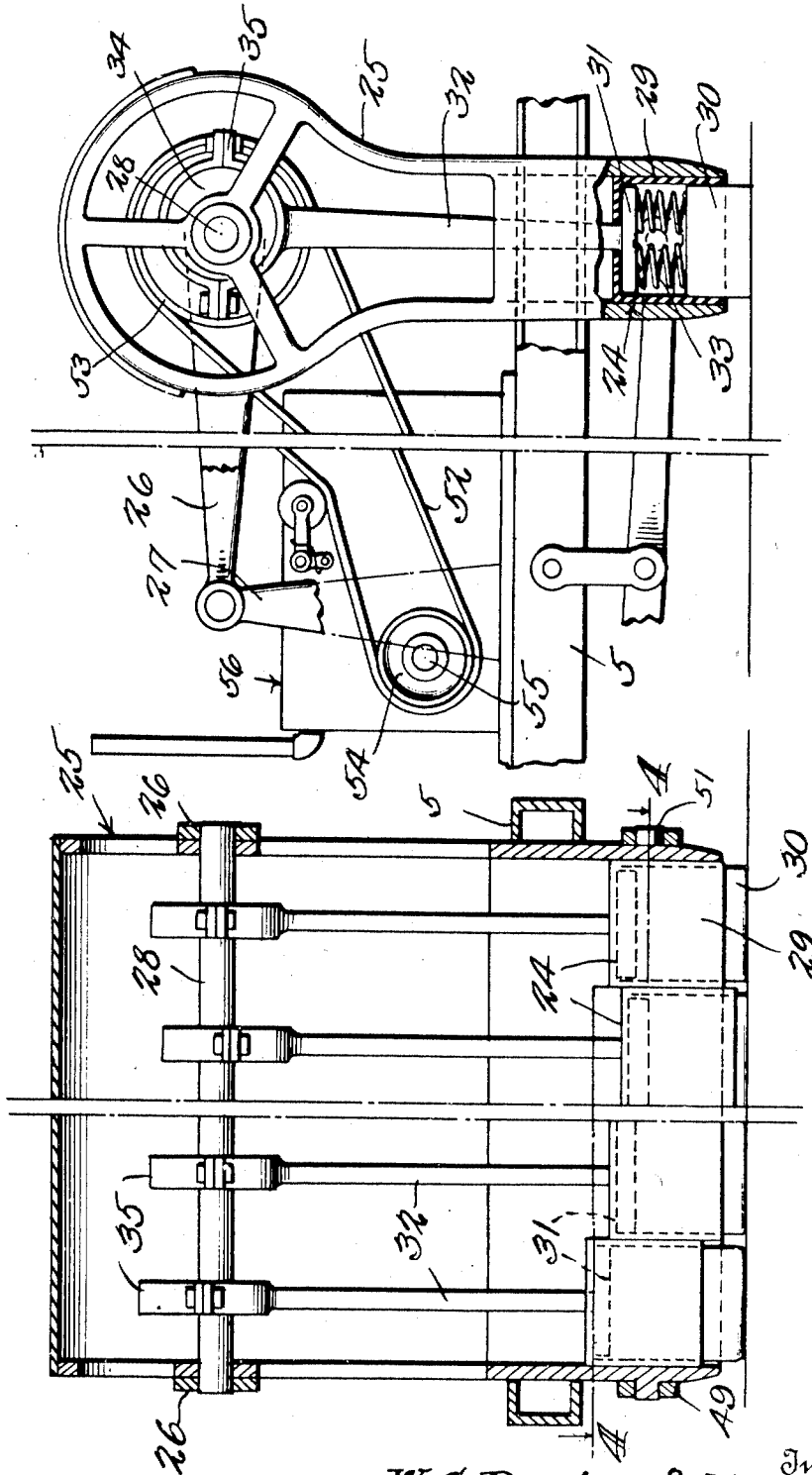


Fig. 2.

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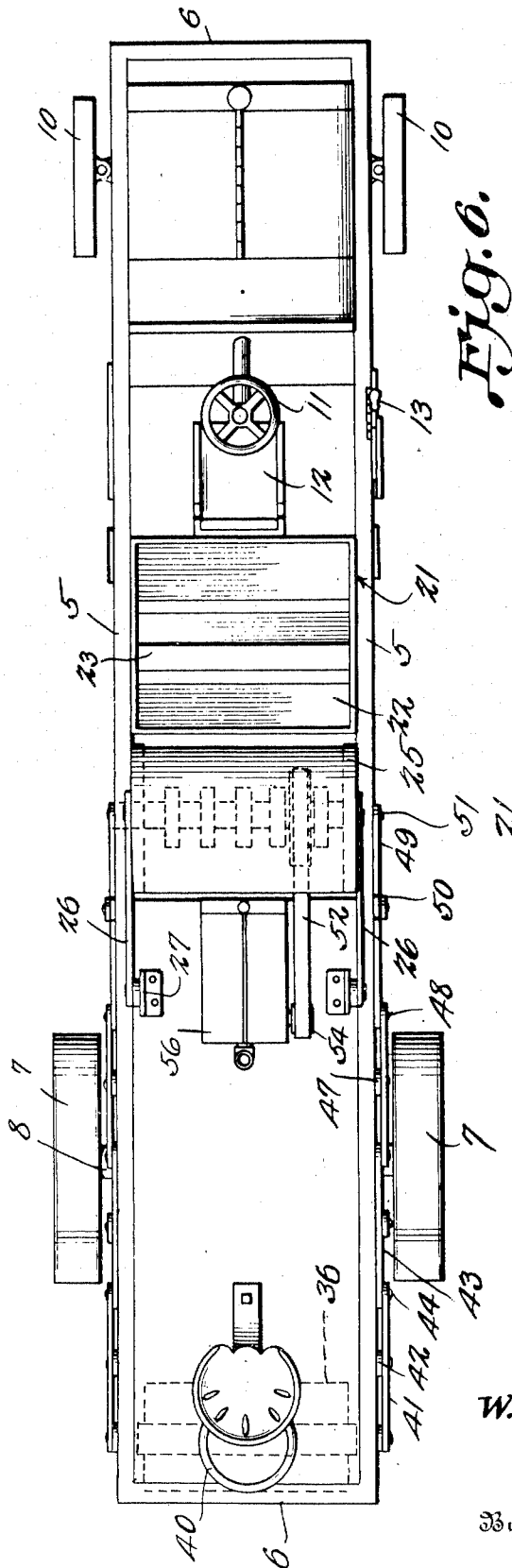


Fig. 6.

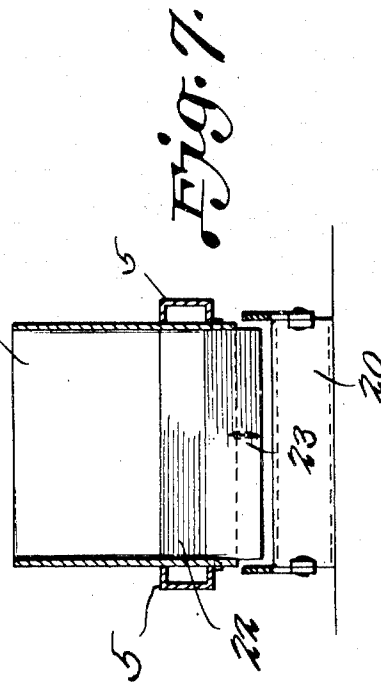


Fig. 7.

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UNITED STATES PATENT OFFICE.

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ROAD TAMPER.

Application filed July 2, 1926. Serial No. 120,187.

This invention relates to road machines, and more particularly to a machine especially designed for loosening the road surface, redressing, and finally leveling and tamping the surface.

Another object of the invention is to provide means for adjusting the tampers, with respect to the ground surface over which the machine is moving, to compensate for high and low places in the road surface and to insure an even surface.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is a side elevational view illustrating a road machine constructed in accordance with the invention.

Figure 2 is a vertical sectional view through the tampers and tamper housing.

Figure 3 is a side elevational view of the tampers and tamper housing, one of the tampers being shown in section.

Figure 4 is a sectional view taken on line 4-4 of Figure 2.

Figure 5 is an elevational view of the adjusting roller.

Figure 6 is a plan view of the machine.

Figure 7 is a sectional view taken on line 7-7 of Figure 1.

Referring to the drawings in detail, the device includes a frame embodying side rails 5 which are connected at their ends by means of the rails 6, that hold the side rails in proper spaced relation with each other.

The rear of the frame is supported by means of the wheels 7 mounted on the axle 8 that operates in the bearings 9 secured to the under edges of the side rails 5.

The front of the frame is supported by the wheels 10 that may be guided by means of the wheel 11, and other suitable mechanism not shown so that the machine may be properly guided over a road surface. Adjacent to the operator's seat which is indicated at 12 is a lever 13 that has connection with the link 14 which in turn connects with the arm 15 of the scraper 16, the scraper being pivotally supported by means of the brack-

ets 17 secured to the opposite sides of the frame.

Depending from the underside of the frame are brackets 18 to which the drag 19 is pivotally connected, the drag being provided with pockets 20 or openings through which material may pass. The reference character 21 indicates a gravel bin which is disposed directly over the drag 19 for supplying gravel or other suitable surface dressing material to the drag 19.

This bin is provided with a hopper bottom 22, there being provided an adjustable closure 23 which when moved to its open position, provides chutes over which the material may pass as it is being delivered to the drag. From the foregoing it will be obvious that due to this construction, the device may be adapted for spreading material of various grades, since the opening through which material passes from the bin may be regulated.

The tampers forming an important feature of the invention are indicated by the reference character 24, and as shown, these tampers are encased in the housing 25 adapted to move vertically between the side rails 5. The housing is held in an upright position by means of arms 26 that have pivotal connection with the upstanding arms 27, the forward ends of the arms 26 having connection with the shaft 28 that carries the cams for operating the tampers in a manner to be hereinafter more fully described.

As clearly shown by Figures 2 and 3 of the drawings, the tampers embody heads indicated at 29, each head being provided with a movable weighted section 30, held in spaced relation with the head 31 of the connecting rod 32 associated therewith by means of coiled springs 33 to the end that the jar directed to the tampers incident to the tampers engaging the road surface will be absorbed, relieving the machinery of excessive strain and undue wear.

Eccentrics 34 are mounted on the shaft 28 to which the collars 35 are connected, to the end that as the shaft 28 is rotated, the connecting rods 32 will be moved longitudinally of the tamper housing to tamp the ground surface over which the device is moving.

Mounted at the rear of the frame of the machine, is a roller 36 that operates on the shaft 37 mounted in the bearings formed in the ends of the arms 38. An adjusting screw indicated at 39 has connection with the arms

38 and is controlled by means of the hand wheel 40 to the end that by rotating the hand wheel, the screw and roller may be adjusted vertically.

At each end of the roller 36 is a link 41 that is hung at the lower end of a supporting link 42, the link 41 having connection with link 43, at 44, and which link 43 is supported by the depending supporting link 45. The link 46 has pivotal connection with link 43 and is supported by the link 47, the link 46 being pivotally connected at 48 with the link 49 mounted at the lower end of the link 50, the forward end of the link 49 having pivotal connection with the tamper connection at 51.

From the foregoing it will be obvious that when the roller 36 is adjusted to move the same upwardly, the tamper housing will be moved upwardly elevating the tampers to adjust them for an elevation, or irregularities in the road surface, as when the machine is moving over a hollow portion in the road surface.

Upon movement of the roller in the opposite direction, it will be obvious that the tamper housing and tampers, will also be moved in the opposite direction compensating for a depression in the road surface in a manner to insure the leveling of the road surface.

Power may be supplied to the shaft 28, by means of the belt 52 operating over the pulleys 53 and 54, the latter pulley being secured to the outer end of the shaft 55 of the motor 56.

In the use of the machine, any suitable power may be employed for propelling the machine and when the machine has been properly positioned, the scraper is adjusted by the operator to cause the surface of the road to be thoroughly scraped and loosened. Material such as gravel or similar top dressing material is released from the bin 21,

where it falls onto the drag 19 and is leveled. The machine now, in passing along brings the tampers directly over the surface which has been loosened and leveled, whereupon the tampers tamp the soil providing a hard road surface.

We claim:

1. In a road machine, a wheel supported frame, a tamper housing supported by the frame, tampers mounted for vertical movement within the housing, a plurality of pivotally connected links, means for supporting the links in spaced relation with the frame, one of the links having connection with the tamper housing, a vertically adjustable roller, one of the links having connection with the vertically adjustable roller, and said roller adapted to move to operate the links to adjust the tamper housing vertically.

2. In a road machine, a frame, a vertically adjustable tamper housing, tampers operating in the tamper housing, means for operating the tampers, links pivotally connected to the tamper housing at opposite sides thereof, links pivotally connected with the first mentioned links, means for pivotally supporting the links on the frame, and means for operating the links to move the tamper housing vertically.

3. In a road machine, a tamper housing mounted for vertical movement on the frame, tampers in the tamper housing, a plurality of pivotally connected links mounted on the frame, certain links being connected with the housing, means for operating the links to move the tamper housing in a true vertical plane, and means for operating the tampers.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures.

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