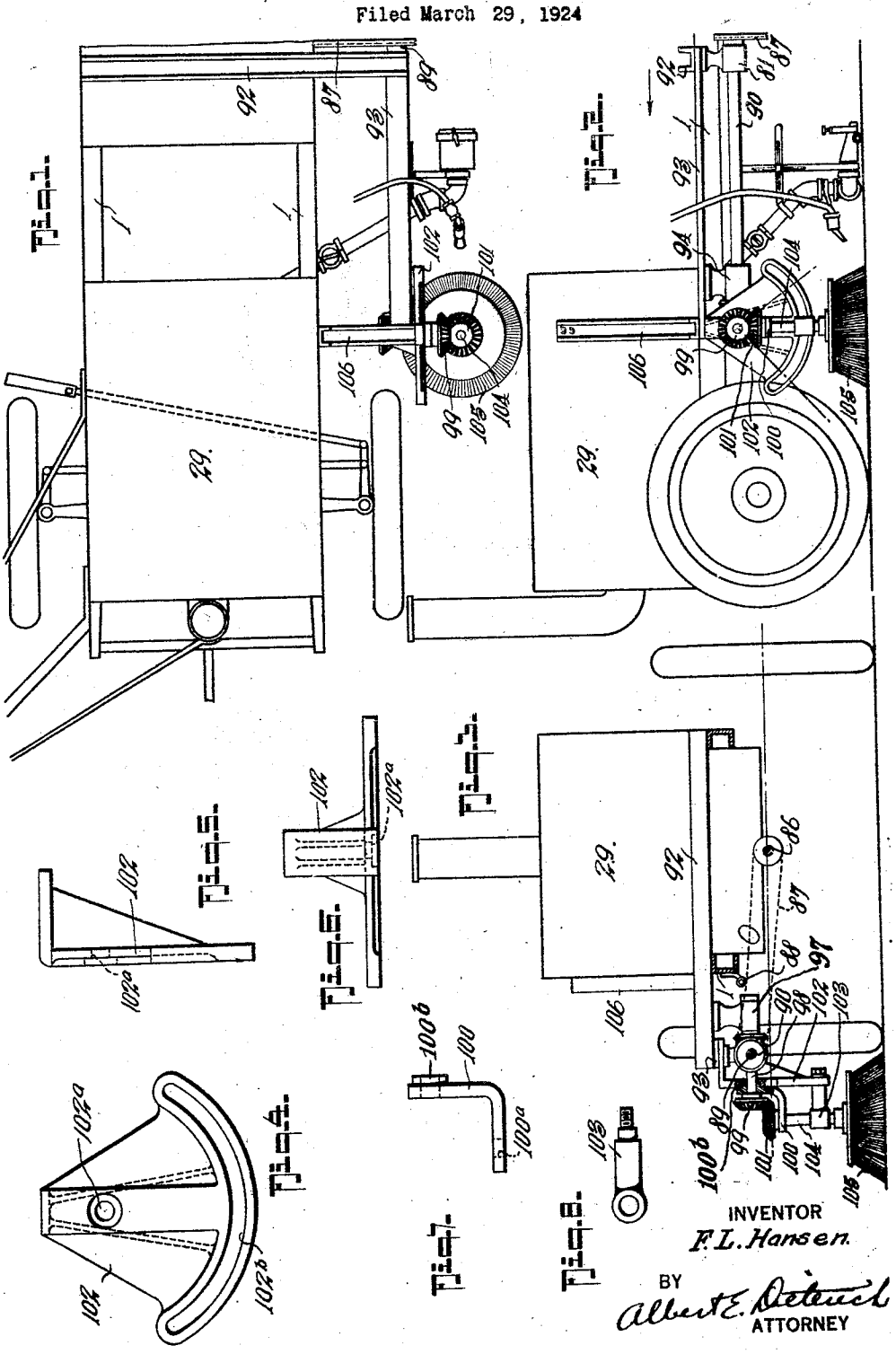
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F. L. HANSEN

ROTARY BRUSH ATTACHMENT FOR TRAFFIC LINE LAYING APPARATUS

Filed March 29, 1924



INVENTOR
F. L. Hansen.
BY
Albert E. Dieterich
ATTORNEY

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UNITED STATES PATENT OFFICE.

FRED L. HANSEN, OF PLAINFIELD, ILLINOIS.

ROTARY-BRUSH ATTACHMENT FOR TRAFFIC-LINE-LAYING APPARATUS.

Application filed March 29, 1924. Serial No. 702,924.

To all whom it may concern:

Be it known that I, FRED L. HANSEN, a citizen of the United States, residing at Plainfield, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Rotary-Brush Attachments for Traffic-Line-Laying Apparatus, of which the following is a specification.

The invention relates to apparatus for laying a traffic line upon streets or roadways such as are usually utilized for marking such streets or roadways to guide traffic thereover.

In my application filed January 15, 1924, Serial No. 686,353 I have disclosed a traffic line laying apparatus comprising, generally, a supporting frame, means whereby the frame may be drawn along a roadway, means for steering the movement of the frame, means for guiding the steering action, a kettle carried by the frame for containing the substance of which the line is to be laid, a nozzle for laying the line, a pipe line through which the substance is supplied from the kettle to the nozzle, road cleaning devices carried in advance of the nozzle, a bin carried by the frame and adapted to carry a supply of sand and having a discharge throatway, a distributor chute in communication with the discharge throatway and having its distributing end adjacent the roadway in alignment with the nozzle, distributing pins in said chute for distributing the sand over the line being laid, an agitator device cooperative with the discharge throatway to cause the sand to flow freely therethrough, and means to drive said agitator.

My present invention more particularly has for its object to provide a modified construction of the road cleaning device employed in such apparatus.

Generally the present invention comprises a brush rotating on a vertical axis with mechanism for driving the same from some moving part of the vehicle, and with mechanism by which it may be swung up away from the roadway when not being used, as well as for the purpose of varying the amount of pressure contact with the roadbed.

More specifically the invention comprises those novel details of construction, combination and arrangement of parts, all of which will be first fully described, then be specifically pointed out in the appended claims reference being had to the accompanying drawing, in which:—

Figure 1 is a top plan view, largely diagrammatical, of a traffic line laying apparatus embodying my invention.

Figure 2 is a side elevation of the same.

Figure 3 is an elevation section looking in the direction of the arrow in Figure 2.

Figure 4 is an enlarged detail of the slotted arcuate supporting member.

Figure 5 is a side elevation of the same.

Figure 6 is a plan view of the same.

Figure 7 is an enlarged elevation of the upright shaft, upper bearing and swiveling device.

Figure 8 is an enlarged detail view of the lower bearing for the upright shaft.

In the drawing, 1 is the vehicle frame on which is mounted a suitable carrying frame 92—93 and supporting bracket 106, the latter being secured to the tank 29 that contains the marking fluid.

Rigidly secured to the carrier frame and preferably located beneath the bracket 106 is a support 102 having a bearing passage 102^a and a curved slot 102^b, the latter being concentric with the bearing passage.

100 indicates the upper bearing and swiveling device for the upright shaft 104, the same having a bearing aperture 100^a to receive a shaft 98 and having a swivel bearing boss 100^b to enter the passage 102^a and receive the cross shaft 98. The cross shaft 98 is also journalled in a fixed bearing 97 that is carried beneath the bracket 106.

The shaft 104 also is journalled in a lower bearing member 103 that is adjustably secured in the slot 102^b to the support 102. On altering the place of connection of the bearing member 103 to the support 102, the position of the axis of the brush, and consequently the position of the brush, may be altered as indicated in dotted lines in Figure 2 for the purpose of raising the brush more or less from the roadbed.

The shaft 104 is driven from the shaft 98 by bevel gears 99—101 and the shaft 98 may be driven by a line shaft 90 that is mounted in suitable bearings 81—94 and itself driven in any suitable way, (as for example by sprocket and chain mechanism 89, 88 and 87) from a suitable moving part 86 of or carried by the vehicle.

From the foregoing description it will be seen that by changing the angle of the shaft

104 with respect to the pivot axis of the swiveling device 100, more or less of the brush or broom may be held in contact with the ground or it may be wholly swung up out of the way as before indicated.

From the foregoing description, taken in connection with the accompanying drawing, it is thought the complete construction, operation and advantage of my invention will be clear to those skilled in the art.

What I claim is:

1. In a traffic line laying apparatus, a road cleaning device comprising a relatively fixed support having a curved slot, an upright shaft bearing and swiveling device pivoted to said support, a lower upright shaft bearing secured to said slotted support, an upright shaft journalled in said bearings, a brush on said upright shaft, and means to drive said upright shaft.

2. In rotary brush mechanism for traffic line laying apparatus, a circular brush, an upright shaft carrying said brush, an upper and a lower bearing member for said shaft, a rigid support comprising an arcuate slotted member having a bearing aperture, said upper support having a boss fitting said bearing aperture swivelly, means adjustably securing said lower bearing member to said slotted member in the slot thereof, and means to drive said shaft said driving means including a shaft passing through said boss and gear connected with said upright shaft.

FRED L. HANSEN.