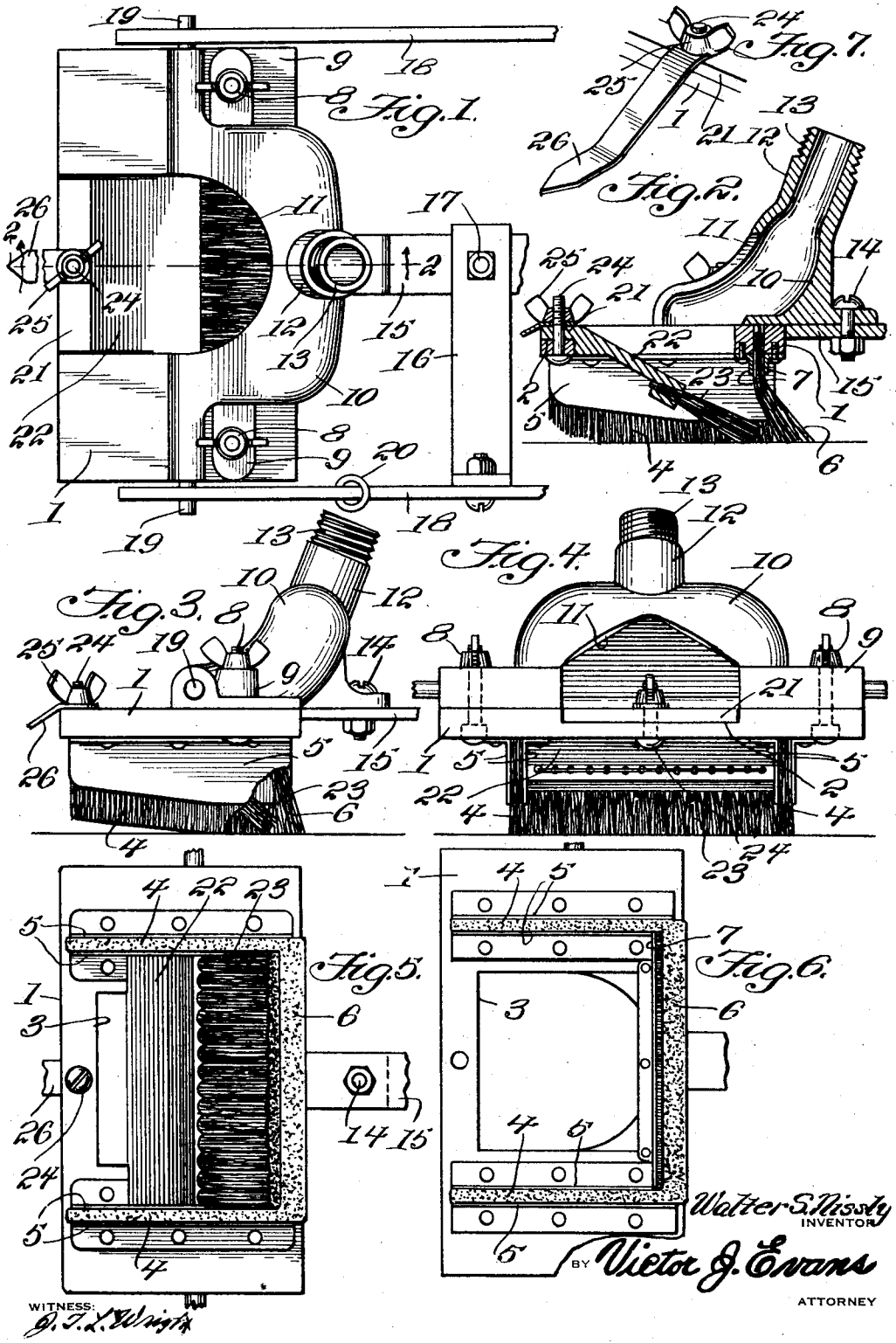
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BRUSH FOR ROAD MARKING MACHINES

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BRUSH FOR ROAD-MARKING MACHINES.

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Broadly my invention has reference to a machine for painting lines of demarcation on road beds to indicate to traffic passing in opposite directions that they are to keep within the side of the road bed and the warning line, and consequently prevent collision between such vehicles which otherwise is very liable to occur.

Specifically the improvement is directed to a brush head or paint applicator to be used in connection with a truck provided with a tank for containing a marking fluid or paint and another tank for forcing such marking fluid under pressure into the brush or applicator, as for instance such road marking machine as forms the subject matter of my copending application Serial No. 164,036, filed by me January 27, 1927.

A further object is the provision of a brush or applicator for painting a division line in the center of a road bed that is provided with a pointer guide for accurately directing the same, guard brushes at the sides thereof, a painting or spreading brush at the rear or between the guard brushes, an intermediate brush arranged at an inclination and directed toward the rear brush, a paint cup or receptacle that delivers the marking fluid onto the directing brush, together with means for pivotally supporting the brush head on a support at one side of the wheeled tank carrying truck and means for adjusting the brush angularly with respect to the road bed.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawings which form part of the application, with the understanding, however, that the improvement is capable of extended application and is not confined to the exact showing of the drawings nor to the precise construction described, and, therefore, such changes and modifications may be made therefrom as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

In the drawings:

Figure 1 is a top plan view of the improvement.

Figure 2 is a sectional view approximately on the line 2—2 of Figure 1.

Figure 3 is a side elevation of the improvement.

Figure 4 is a front elevation thereof.

Figure 5 is a bottom plan view thereof.

Figure 6 is a similar view with the central or directing brush removed.

Figure 7 is a perspective view of the pointer guide.

Preferably the body of my improvement is constructed of metal but obviously other suitable material can be employed.

The brush head is indicated in the drawings by the numeral 1, the same being of a substantially rectangular formation, having at its upper face and its outer edge a central longitudinally arranged notch or depression 2 and a rectangular opening 3 in a line with the side walls formed by the depression 2. The opening terminates a suitable distance from the rear of the plate that constitutes the brush head. The bristles for the sides or guard brushes 4 are fastened to the head in any desired or preferred manner, and these bristles are arranged between depending plates in the nature of shields 5, the lower edges of the shields being cut at an inclination, and the top edges thereof being flanged and bolted, riveted or otherwise secured to the under face of the brush head 1. The rear brush is indicated by the numeral 6 and the bristles thereof are secured to the brush head, the said brush head, on the inner face thereof, having secured thereto inner and outer angle plates whose depending flanges 7, contact with the inner and outer faces at the top portion of the spreading brush 6.

Secured on the top of the plate constituting the brush head through the medium of removable means 8 there are the solid ends 9 of a paint or marking fluid receiving cup 10. The cup is of a width greater than the opening 3 in the brush head and the outer face of the said cup, in a line with the said opening is notched or cut-away, as at 11, and the notched or cut-away portion of the receptacle provides the outlet mouth thereof. Integrally formed on the top and at the center of the receptacle 10 there is a tubular extension 12 having a threaded end portion 13 to which is connected the hose leading from the fluid tank of the machine to one side of which the improvement is attached.

Extending rearwardly from the flat and closed bottom of the receptacle 10, and bolted thereto, as at 14, there is a plate 15. This

plate is arranged below and in the path of contact with a laterally extending plate 16, and connecting the plates 15 and 16 there is adjustable means 17. The means may comprise a bolt passing through the plates and engaged by a nut, as disclosed by the drawings or a wing nut that passes freely through the plate 16 and is threaded through the plate 15.

The plate 16 has an angle end which is bolted to one of the arms 18 of the support for the brush head or applicator. Both arms of the support are provided with openings adjacent to their ends, and the walls of these openings afford bearings for short shafts or trunnions 19 that extend from the closed ends 9 of the receptacle 10. The arms 18 have their rear portions connected by a shaft (not shown) upon which the wheels for the truck (also not shown) are journaled.

One or both of the arms 18 of the support have attached thereto an eye member 20 engaged by a rod which leads to the handle of the truck, and whereby the brush may be raised or lowered and likewise whereby the brush may be forced against the road bed with desired friction.

Seated in the depressed portion 2 of the plate or brush head 1 there is the notched and straight end 21 of an angularly disposed plate 22 which is received through the opening 3. Secured to the end of this plate 22 there is a directing brush 23. This brush is normally disposed in contacting engagement with the paint spreading brush 6. The plate 22 is secured on the brush head by removable means, such as a bolt 24 which is engaged by a wing nut 25 and the bolt 24 passes through an opening in the downwardly directed or angularly disposed pointer guide 26. The pointer guide 26 is contacted by the wing nut 25 and thereby arranged forwardly and centrally with respect to the brush head. If desired, the plate 22 may be notched for the reception of the inner end of the pointer guide therein.

As disclosed by Figure 2 of the drawings, a determined downward pressure upon the rear portion of the brush head will cause the brush 6 of the applicator to spread away from the brush 23, consequently leaving a space between these brush elements for the passage of paint or other marking fluid which will thus be directed onto the road surface for imprinting the line of demarcation thereon. Thus by adjusting the pressure applied to the brush head the quantity of paint delivered onto the road surface will be regulated. The outer and lower ends of the side and guard brushes 4 are inclined and only when a determined pressure is brought upon the brush heads are these edges of the guard brushes brought against the road surfaces. The guard brushes prevent the outward spreading of the mark made by the brushes 23 and 6. When the air is shut off from the air tank on the truck the device may be tilted so that all of the paint remaining in the pockets between the brushes 23 and 6 and likewise the paint remaining in the cup 10 may be redelivered into the paint tank and the brushes are normally returned to initial position to close the paint outlet space therebetween. The device may be readily cleaned as the directing brush is removably attached to the brush head. Obviously the presser rod need not be attached to the link or eye but may have an angle end passing through one of the arms 18 or may be attached to another part of the construction.

The simplicity of the construction and the advantages thereof will, it is thought, be apparent without further detailed description.

Having described the invention, I claim:

1. In a road marking machine, a brush head, a swingable mount on which the brush head is journaled, means for tilting and sustaining the brush head angularly with respect to its mount, said brush head having depending rear bristles, and depending side bristles and central bristles angularly arranged between the side and rear bristles and means for exerting a pressure upon the brush head to spread the rear bristles away from the central bristles.

2. In a road marking machine, a brush head, a swingable mount on which the brush head is journaled, means for tilting and sustaining the brush head angularly with respect to its mount, a pointer guide arranged centrally on and projecting beyond the brush head, said brush head having depending rear bristles, and depending side bristles and central bristles angularly arranged between the side and rear bristles, and means for exerting a pressure upon the brush head to spread the rear bristles away from the central bristles.

3. A road marking machine, designed to be arranged to one side of a truck having a paint receptacle and controlled air under pressure for forcing the paint out of the receptacle, of a brush head, a mount on which the brush head is journaled, and which is designed to be pivotally secured to the shaft for the wheels of the truck, said brush head having a central depressed portion on its outer end and an opening in a line with the side walls provided by the depression, a paint receiving cup designed to be connected to the outlet of the paint tank and having an open face in a line with the opening in the head, a depending spreader brush on the rear of the head, inner and outer plates fixed to the head and contacting the outer sides of the brush, guard brushes on the sides of the head, comparatively wide plates fixed to the under face of the brush head and contacting with the opposite sides of the guard brushes,

an angularly disposed plate having a straight end which is notched and which is received in the depressed portion of the brush head, a brush carried by the plate directed toward the rear spreading brush, removable means fixing the plate to the brush head, a pointer guide supported on the brush head by said means, means for tilting and supporting the brush head with respect to its mount and means for exerting a pressure upon the brush head, for the purpose set forth.

In testimony whereof I affix my signature.

WALTER S. NISSLY.