June 17, 1941. E. HAECKER 2,245,777

STREET PRINTING APPARATUS

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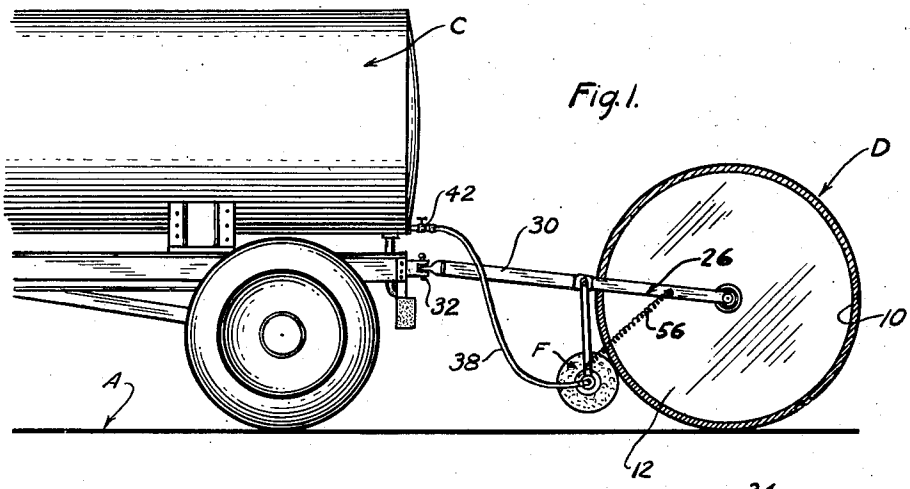


Fig. 1.

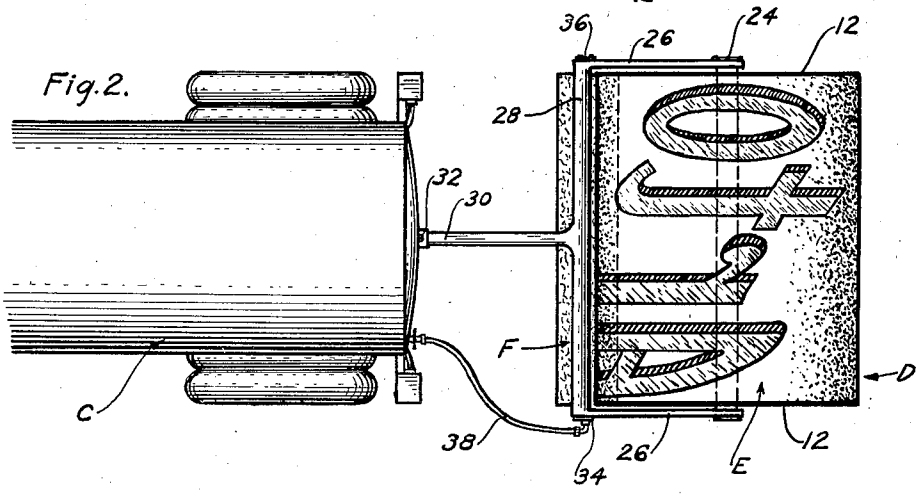


Fig. 2.

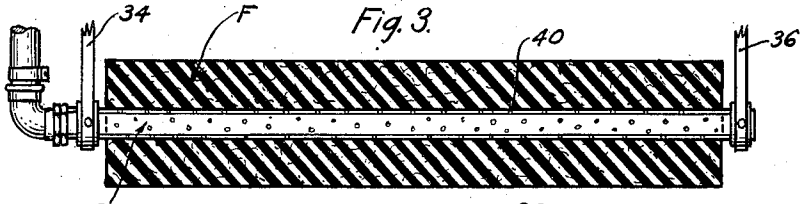


Fig. 3.

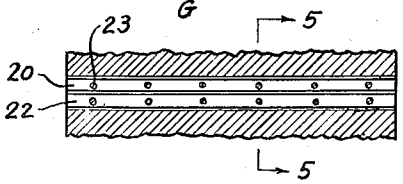


Fig. 4

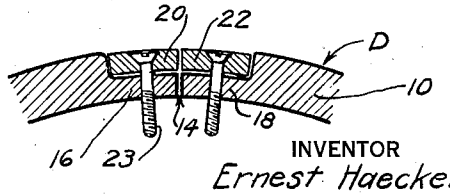


Fig. 5

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STREET PRINTING APPARATUS

Ernest Haecker, Philadelphia, Pa.

Application June 19, 1939, Serial No. 279,776

1 Claim. (Cl. 101—415.1)

My invention relates to advertising and relates particularly to advertising on streets or roads.

Heretofore, advertising of articles has been made by distributing handbills, newspapers, radio, as well as skywriting from aeroplanes. However, no successful street writing with vaporizable liquid has been available. Suggestions have been advanced to write or imprint advertisements on streets or roads, but they were not practical because of the cumbersome and costly equipment required.

It is, therefore, an object of my invention to provide a street advertising device which clearly prints on streets or roads.

Another object of my invention is to provide a street advertising mechanism, which utilizes a liquid which remains on the street for a limited period of time, and which also absorbs the heat from the street or road and thereby results in a cooling effect.

Another object of my invention is to provide a street advertising device having a printing drum cleaning unit as well as a wetting device for the printing unit.

Another object of my invention is to provide a device which may print street advertisements in different colors.

Other objects of my invention are to provide an improved device of the character described, that is easily and economically produced, which is sturdy in construction and which is highly efficient in operation.

With the above and related objects in view, my invention consists in the following details of construction and combination of parts, as will be more fully understood from the following description, when read in conjunction with the accompanying drawing, in which:

Fig. 1 is a fragmentary side elevational view of a roller having the street imprinting mechanism thereon and being attached to the rear of a tank car.

Fig. 2 is a plan view of the device illustrated in Fig. 1.

Fig. 3 is a fragmentary sectional view showing the liquid applicator.

Fig. 4 is a fragmentary plan view illustrating the plates attached to the roller, which plates are utilized to hold the rubber mat containing the advertising matter thereon in position.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 4.

Referring now in detail to the drawing, I show a vehicle supporting a reservoir tank, generally designated as C, having attached to it a roller or printer, generally designated as D, and the roller D having a cylindrical surface 10 and a cover 12 for each end. The cylinder surface is split, as at 14, in order to provide a tension on a mat, generally designated as E, made of rubber or other suitable material, which mat has the advertising cut therein in reverse form as compared to the advertisement printed on the ground or street.

The ends 16, 18 of the cylinder 10 are undercut in order to receive holding bars 20, 22, respectively. The bars are held to the ends of the cylinder by means of threaded bolts 23, and one end of the mat is held between the cylinder end 16 and the holding bar 20 while the other end of the mat is held between the second cylinder end and the holding bar or plate 22. Thus, by pulling the mat E tightly around the cylinder D of resilient material and fastening its ends by the bars 20, 22, the imprint will be perfect.

A rod or axle 24 passes through the longitudinal center of the cylinder D and the end members 12, and to each end of the axle 24 is attached a rectangular pulling shaft 26. The other ends of the shafts 26, 26 are joined by a cross rod 28, and to the center of the cross rod is a tie rod 30 which has its end 32 swivelly joined to the back of the vehicle C.

The mechanism for applying liquid to the roller D comprises a rubber sponge-like liquid absorber and applicator, generally designated as F, which is mounted upon a perforated metal tube, generally designated as G. The tube or pipe G is supported from arms 34, 36 which are pivotally from the arms 26, 28, respectively. The fluid applicator F is mounted upon suitable bearings so that the motion of the printing roller D revolves the applicator F as the two units are pressed together by virtue of the tension spring 56.

A flexible liquid carrying hose 38 is connected at one end to the tank A, and the other end of the hose is suitably joined to the perforated tube G so that liquid may pass from the tank A through the hose 38 into the perforated tube G, and then into the applicator F. The small perforations 40 in the tube G limit the quantity of liquid which may pass therethrough in order to avoid having the liquid drip upon the street. The liquid flow from the tank also may be controlled by virtue of a valve 42 located in the tube communication line.

Although my invention has been described in considerable detail, such description is intended as illustrative rather than limiting, since the in-

vention may be variously embodied, and the scope of the invention is to be determined as claimed.

I claim as my invention:

A machine for printing advertisements on streets or roads comprising a single continuous hollow cylindrical member of substantially a constant diameter and made of resilient material, said cylinder split in a longitudinal direction, the ends of said roller along said split being aligned and depressed below the outside circumference of the wheel, a plurality of bars, each bar interfitting with one depressed end of said roller whereby the bar will extend to substantially the outside circumference, a tightly fitted rubber mat placed on the circumference of said roller, and the ends of said mat being held by said bars within said depressions whereby said mat is held under tension on said hollow split cylinder.

ERNEST HAECKER.