July 8, 1930. F. R. ALLEN 1,769,980

MACHINE FOR PRODUCING LINES AND MARKS

Filed Feb. 8, 1926

Fig. 1.

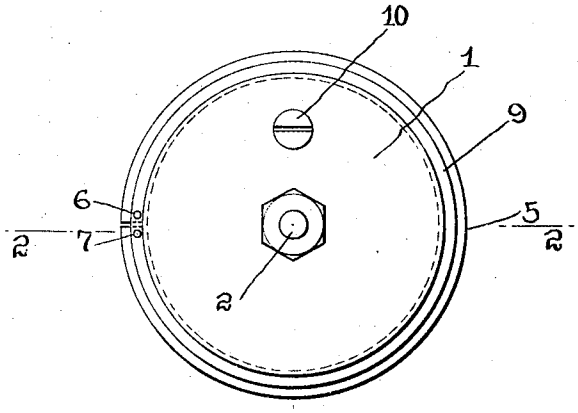


Fig. 2.

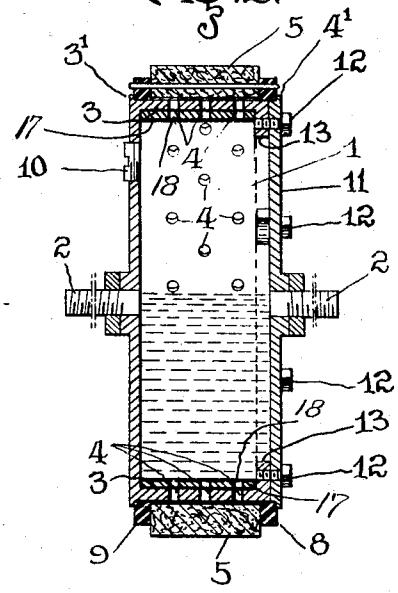


Fig. 3.

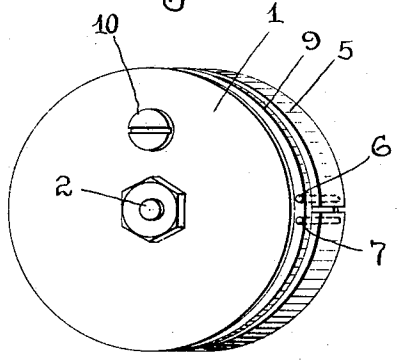
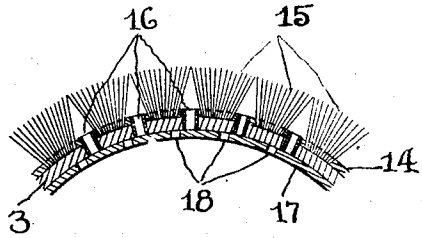


Fig. 4.



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UNITED STATES PATENT OFFICE

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MACHINE FOR PRODUCING LINES AND MARKS

Application filed February 8, 1926. Serial No. 86,773.

My invention relates to improvements in machines for producing lines and marks.

The object of my invention is to provide a simple and convenient machine whereby lines or marks may be made upon a surface.

The best mode in which I have contemplated applying my said invention is illustrated in the accompanying drawings in which:

Figure 1 is a side elevation of the device,

Figure 2 is a vertical section of the same on the line 2—2 in Figure 1,

Figure 3 is an isometric view of the device, and

Figure 4 is an optional form of the peripheral marking brush.

Similar characters of reference refer to similar parts throughout the several views.

My improved device includes a cylindrical tank 1 provided with an axle 2, by which it may be rotatably mounted on any convenient carriage. The cylindrical wall 3 of tank 1 has peripheral discharge apertures 4 therein. Circumferential flanges 3^1, 4^1 are preferably provided along the side edges of the wall 3. Abutting each flange 3^1, 4^1 and surrounding the circumferential wall 3 are a pair of rings 8, 9 preferably of rubber. These rings are rectangular in cross section.

A compressible absorbent pad or shoe 5 is arranged upon the cylindrical wall of the tank 1 between the rings 8, 9 and may be detachably secured thereon by means of pins 6 and 7 inserted through its ends and the rings 8, 9. The pad or shoe 5 is of greater thickness than the rings 8, 9 and therefore extends beyond the circumference of the rings.

One side 11 of the tank 1 is preferably detachable to permit access to the interior of the tank 1 for cleaning and is secured thereon by means of bolts 12, 12 inserted therethrough and secured in ears 13, 13 or the like on the wall of the tank 1.

Marking fluid is supplied to the tank 1 at the supply port 10 and, by reason of the peripheral discharge apertures 4, will saturate the absorbent pad or shoe 5. As the tank is rolled over a surface to be marked, the marking fluid will be deposited or impressed upon the surface by the absorbent pad 5 which will be compressed by the weight of the tank 1 until the rings 8, 9 are in contact with the surface whereby the marking fluid will be pressed out of the pad. This pad 5 is preferably of a resilient nature which will expand when the pressure or weight of the tank is removed and will draw into itself the marking fluid as the point of pressure is passed. The rubber rings 8 and 9 at the sides of the absorbent pad or shoe 5 will serve to limit the spread of the marking fluid laterally beyond the area which it is desired to cover.

An optional form of marking shoe is illustrated in Figure 4. In this form of the device, I provide a suitable fabric or the like 14 carrying bristles 15, upon the periphery of the tank 1, in place of the absorbent shoe 5, above described. The other parts of the device being as above explained and specified. In this form of the device, the marking fluid is discharged through the peripheral apertures 16 and is spread by the bristles 15. A cut-off or sliding valve is preferably provided in this form of the device and may comprise a cylindrical cut-off plate 17 having apertures 18 which normally register with the apertures 16 of the tank 1 when the device is in use, but which may be moved or rotated to close the apertures 16 when the device is not in use. This form of the device is adapted for use with a heavy marking fluid or paint. The cut-off valve may, however, be used in either form of the device as conditions may require.

Having thus described my invention, what I claim is:

1. In a device of the character described, the combination of a cylindrical tank having peripheral discharge apertures therein, a compressible shoe on the periphery of the tank adapted to be permeated by a fluid contained in the tank, a cylindrical cut-off plate within the cylindrical tank having apertures therein adapted to register with the tank apertures, said plate being rotatable within the tank to cut off flow of fluid to said tank apertures and rings at the sides of the said shoe normally disposed below the plane of the surface of the said shoe and adapted to

limit the area to be covered by the said fluid.

2. A device of the character described comprising a cylindrical tank having end closure means, the cylindrical wall of said tank having apertures therethrough, circumferential side flanges on said wall, a shoe adapted to be permeated by a fluid in said tank and surrounding the wall of the tank, and rings at the sides of said shoe and between said shoe and said flanges normally disposed below the plane of the surface of the said shoe and adapted to limit the area to be covered by said fluid.

3. A device for producing lines comprising a cylindrical tank, means to support said tank for rotation, said tank having circumferential side flanges, spaced rings surrounding said tank and laterally abutting said flanges, a shoe circumferentially surrounding said tank between said rings and normally extending beyond the circumference of said rings, and means to lock said shoe to said rings.

In testimony whereof I affix my signature.

FRANK R. ALLEN.