Sept. 19, 1944. H. T. C. ROSENLUND 2,358,596

DECK MARKER

Filed May 7, 1942

Fig. 1.

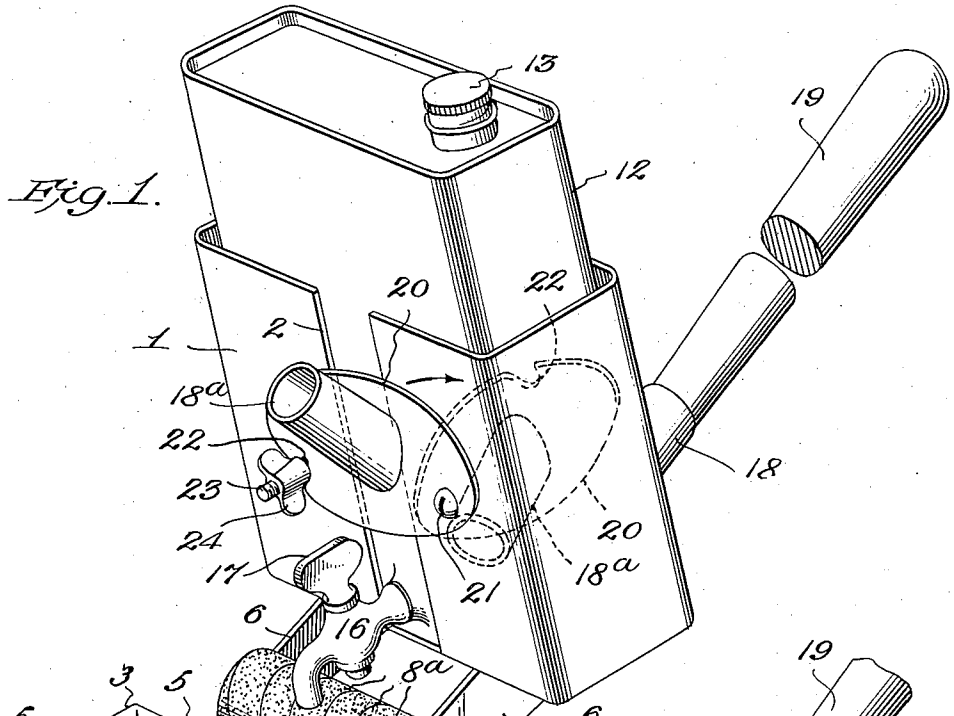


Fig. 4.

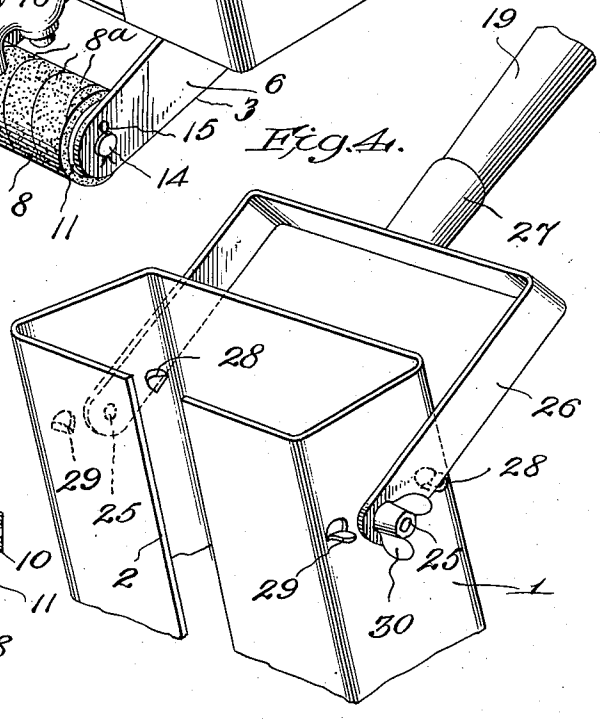


Fig. 2.

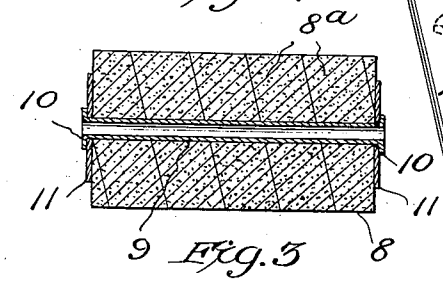


Fig. 3

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DECK MARKER

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4 Claims. (Cl. 91—12)

This invention is an appliance for marking stripes on the decks of ships or on the floors of factories, arsenals, naval training stations, and other buildings.

Heretofore where stripes have been required in such environs, it has been the common practice to use chalk lines in order to determine the lateral edges of the stripe desired, then manually paint along the chalk lines to form the margin of the finished stripe and to finally fill in between these marginal lines with a brush to complete the work. This procedure is arduous and time consuming and the object of the present invention is to provide a device which will eliminate practically all of this manual labor, and permit the marking of finished stripes in but a small fraction of the time heretofore required.

Generally speaking, the apparatus of the present invention comprises a holder having associated therewith a handle whereby it may be manipulated. On the holder is mounted a bracket in which a felt roller is supported for rotation and the weight of the holder is carried on the felt roller as the same is caused to roll along the floor. The holder is constructed to detachably receive a can containing a marking fluid and such can has an outlet cock extending into close proximity with the felt roller, whereby controlled quantities of the liquid can be fed to the roller. Both the roller and can may be readily demounted from the holder and another can and roller substituted when fluids of different colors are desired. The invention is simple in construction, economical to manufacture and of high efficiency in operation.

Features of the invention, other than those adverted to, will be apparent from the hereinafter detailed description and claims, when read in conjunction with the accompanying drawing.

The drawing illustrates different practical embodiments of the invention, but the constructions therein shown are to be understood as illustrative, only, and not as defining the limits of the invention.

Figure 1 is a perspective view showing the preferred form of the present invention.

Figure 2 is a perspective view of a bracket which serves to mount the liquid applying roller on the holder.

Figure 3 is a central longitudinal section through the liquid applying roller.

Figure 4 is a fragmental perspective view of a modified form of construction.

Referring to the drawing 1 designates a holder which may be conveniently constructed from sheet metal. It is in the form of a receptacle having an open top, a closed bottom, and four side walls, one wall of which is provided with a vertical slot 2. On the under side of the holder is mounted a bracket 3 shown in detail in Figure 2. This bracket comprises a plate 4, perforated at 5, so that the plate may be riveted to the bottom of the holder 1 and integral with this plate are parallel arms 6, perforated near their free ends, at 7.

Between the arms 6 is rotatably mounted a liquid applying roller 8 shown in section in Figure 3. This roller is made up of a plurality of face abutting felt disks 8a which are cut on a skew. These disks are placed in face abutting relation and have central alined holes through which is successively passed a tubular bushing 9 and the ends of the bushing are spun outwardly at 10 over washers 11 to tightly clamp the disks in tight face abutting relation, so that the disks are, from an absorptive standpoint, substantially homogeneous.

The reason for forming these disks on a skew is so as to preclude the showing of lines on the printed stripe. If the lines between the disks are wholly in parallel planes, there is a tendency in the use of some marking fluids to show these joints, but where the disks are positioned as illustrated, no such marking is apparent and the resulting stripe is uniform throughout. The felt employed in the fabrication of the disks 8a may be of wool, cotton or any other suitable material which has a high absorption power and through which marking fluid, fed to the roller, will be uniformly dispersed.

The roller, assembled as shown in Figure 3, is positioned between the arms 6 of the bracket and a pin 14 extends through the bushing 9 of the roll and through the perforations 7 of the arms and is provided with a head at one end and a cotter pin 15 at the other to removably hold it in position.

The marking fluid for the roller is adapted to be contained in a can 12 which may conveniently have a screw cap 13. This can is of a size and shape to readily fit into the holder 1, as best shown in Figure 1, and near the bottom of the can is a valved feed cock 16 extending into close proximity to the periphery of the roller. Through the manipulation of the valve 17 the amount of marking fluid fed to the roller may be readily controlled and when no feed is desired, it may be shut off by turning off the valve 17. The can 12 is of a size to fit snugly into the holder which,

being of sheet metal, is somewhat resilient. Thus the can is gripped and rattling is avoided.

The holder is provided with a suitable handle whereby it may be manipulated. For some uses it may be desirable to have one side of the holder facing the operator, while in other cases, the opposite side will be preferable. Provision is therefore made in the showing of the drawing for manipulation of the holder from either side, at the option of the operator. Thus, I mount on the back wall of the holder, opposite the slot 2, a handle socket 18 which may be in the form of a tube welded to the exterior of such back wall at an appropriate angle so that a handle 19 of any desired length may be readily introduced into and tightly fit within the socket. At the opposite side of the holder is an additional handle socket 18*a* rigidly mounted upon a socket plate 20. This socket plate is secured by a pivot 21 at one side of the slot 2 and is provided in its periphery with a notch 22 adapted to normally straddle a pin 23 at the opposite side of the slot. A wing nut 24 may be screwed upon the pin 23 so as to lock the socket plate in normal position. When the wing nut is released, the plate 20 may be swung into the dotted line position so as to free the slot 2 and permit the can to be removed from or replaced in the holder.

It will be understood that the handle 19 may be transferred from the handle socket 18 to the handle socket 18*a*, and vice versa, according to the desire of the operator. The provision for the two modes of operation is illustrated in Figure 1, although either one or the other may be omitted from the commercial structure.

In Figure 4 I have shown an alternate form of construction which will provide for reversability of the handle without its removal. In this form of the invention, the holder 1 is provided at its opposite sides with pivot pins 25 to which are pivotally secured a bail 26 carrying a handle socket 27 in which the handle 19 is adapted to be secured. This bail may be swung about the pivots 25 into cooperation with either set of stops 28, 28 or 29, 29, depending upon the way in which the operator desires to employ the device, and said bail may be locked in either position by means of wing nuts 30 associated with the pins 25.

In practically employing the present invention I preferably use inks or stains of various colors contained in cans such as the can 12. According to the marking desired a can containing fluid of the appropriate color is introduced into the holder and a new felt roller, or one which has been used with the same color as before, is secured to the bracket. Thereafter the operator simply grasps the handle 19, and with the roller 8 resting on the surface to be marked, moves the device along such surface with the roller in contact therewith. Meanwhile, marking fluid, fed through the feed cock 16, saturates the roller and is transferred thereby to such surface, leaving thereon a clear stripe which, because of the character of the marking fluid employed dries immediately upon application, leaving a clear and distinct stripe. By employing a bracket as shown, the edge of the bracket may be caused to move along a straight edge, such as a board or guide of any appropriate material laid upon the surface and in this way the stripe may be, in effect, ruled according to the shape that may be desired.

The invention has filled a long felt want in the United States Navy for various deck marking purposes and in this use a long handle is employed, so that the operator may manipulate the device while he is in standing and walking positions. In the employment of this device, it is possible now to do in a fraction of an hour work which, under the prior practice, has required the labor of several men a plurality of days.

The foregoing detailed description sets forth the invention in its preferred practical form, but the invention is to be understood as fully commensurate with the appended claims.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is:

1. A deck marker comprising a sheet metal holder in the form of a receptacle having an open top and a closed bottom and four closed side walls, one of which is provided with a vertical slot therein, a can for marking fluid positioned in the holder and provided near its bottom with a valved outlet extending through said slot, a marking roller mounted on the holder for rotation in a position beneath the valved outlet and adapted to roll upon the surface to be marked, and an operating handle on said holder.

2. A deck marker comprising a sheet metal holder in the form of a receptacle having an open top and a closed bottom and four closed side walls, one of which is provided with a vertical slot therein, a can for marking fluid positioned in the holder and provided near its bottom with a valved outlet extending through said slot, a marking roller mounted on the holder for rotation in a position beneath the valved outlet and adapted to roll upon the surface to be marked, a socket plate secured to the slotted wall of the holder at one side of the slot and carrying a handle socket, a handle in said socket, and means for locking the socket plate in a position to bridge the slot with the handle in normally operative position, said locking means being releasable to permit the socket plate to be moved away from the slot in order that said can may be removed from or replaced in the holder.

3. A deck marker comprising a sheet metal holder in the form of a receptacle having an open top and a closed bottom and four closed side walls, one of which is provided with a vertical slot therein, a can for marking fluid positioned in the holder and provided near its bottom with a valved outlet extending through said slot, a marking roller mounted on the holder for rotation in a position beneath the valved outlet and adapted to roll upon the surface to be marked, a bail straddling the holder and pivoted to the opposite sides thereof, a handle on said bail, stops on the holder to limit movement of the bail to opposite terminal positions, and means for locking said bail in the desired position.

4. A deck marker comprising an upright receptacle having an open top and constituting the body portion of the marker, a fork directly mounted on said receptacle and carrying a marking roller adapted to support the receptacle from the surface to be marked, a handle also secured to said receptacle to guide the receptacle and cause the marking roller to traverse such surface, and a can for containing liquid, said can being seated in the receptacle through the open top of the latter and having an outlet cock extending into proximity with and above said marking roller.

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