April 28, 1964 L. SMITH 3,130,435

PAINTING DEVICE

Filed July 13, 1961

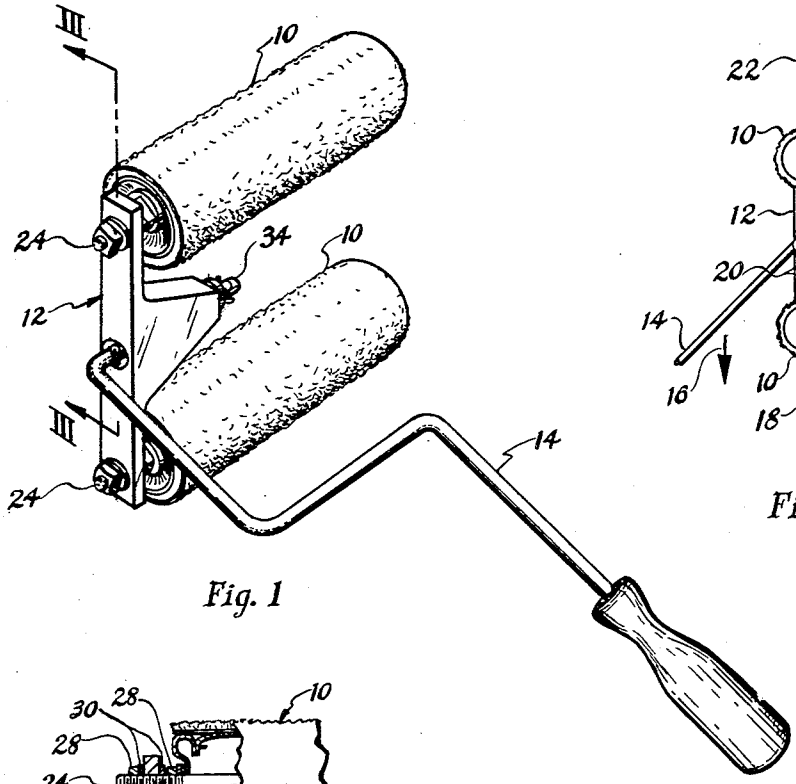


Fig. 1

Fig. 2

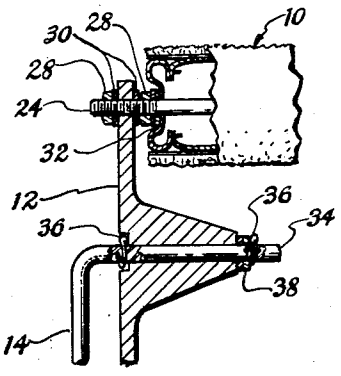


Fig. 3

LILLIAN SMITH
INVENTOR.

BY *Robert A. Spray*
ATTORNEY

United States Patent Office 3,130,435 Patented Apr. 28, 1964

3,130,435

PAINTING DEVICE

Lillian Smith, 12213 Harlem, Palos Heights, Ill.

Filed July 13, 1961, Ser. No. 123,864
2 Claims. (Cl. 15—230)

This invention relates to painting devices, and more particularly relates to painting devices of a roller type such as may be used in applying paint to the walls and ceiling of a dwelling house.

It is an object of my invention to provide a novel painting device which will assure a more uniform layer of paint, and without the necessity for an operator to pass a roller back and forth to achieve the desired uniformity of the paint layer.

A further object is to provide a new and useful painting device which will be convenient and advantageous in use, but which is of simple and economical construction.

A further object is to provide a novel and advantageous painting device which achieves a uniform paint layer, even when used by an unskilled workman or householder.

A still further object of my invention is to provide a novel painting device which achieves the above-stated objects, but which has characteristics of operation generally similar to those of conventional paint-rollers, and will thus be convenient and simple to use, and require little or no special maintenance other than that for conventional paint-rollers.

In carrying out my invention in an illustrative embodiment I provide a carrier bracket having a handle, and on the bracket I mount a pair of paint-rollers in a sort of tandem arrangement. The rollers are rotatable with respect to the carrier bracket; and the handle is rotatably connected to the carrier bracket along an axis generally parallel to the roller axes, and the handle extends from one side of the carrier bracket to provide a grasping portion by which the device may be manipulated.

With this tandem-type roller-arrangement more uniform paint application is achieved; for with a single stroke of the device, uneven paint ridges permitted by the feed roller are smoothed over by the trailing roller. Thus, any portion of the surface to be painted, which has any paint whatever, is of a nature which has already and automatically been smoothed out; and thus there is no necessity for the operator manipulating the roller back and forth several times as is necessary with conventional devices. A better paint application is achieved, and the operator's time is substantially reduced.

The description so far given is introductory and is rather general; and the foregoing and further and more particular objects, features, and advantages of the present invention will further appear in the following, more detailed description, reference being had to the accompanying somewhat diagrammatic drawings, in which:

FIG. 1 is a pictorial view illustrating a tandem-type paint roller according to an illustrative embodiment of my invention;

FIG. 2 is an end-elevational view thereof, illustrating its use in the operation of painting a wall; and

FIG. 3 is a sectional detail of the device shown in FIG. 1, and taken generally along the line III—III of FIG. 1.

As shown in the drawings, a device according to my invention generally comprises a pair of rollers **10**, a carrier bracket or frame **12**, and an operating handle **14**.

The rollers **10** are mounted in a generally parallel arrangement on the frame **12** to provide a sort of tandem arrangement of the rollers. This tandem arrangement of the rollers (as shown in FIG. 2) provides very advantageous paint-applying effectiveness; for, as the device is moved in the direction of a directional arrow **16**, the paint applied to the wall **18** by the leading roller **10**, which paint is in the form of somewhat rough streaks or

droplets **20**, is smoothed by the trailing roller **10** to the desired smooth paint layer **22**.

The tandem arrangement thus permits the application of a smooth layer of paint by a single swipe or pass of the device along the surface to be painted, assuring a more even and uniform application of the paint, for all portions of the surface automatically receive an evening stroke of a roller; moreover, it saves the time of the paint operator.

The rollers **10** are desirably formed of a cylindrical hollow body which is frictionally held to sheet-metal core, permitting easy disassembly for a cleaning the rollers.

In the form of the invention illustrated for purposes of disclosure, each of the rollers **10** is carried on a shaft **24**, the two shafts **24** being mounted at spaced locations along the frame **12**, and extending generally perpendicular to the frame **12** and parallel to one another. The mounting of each shaft **24** on the frame **12** is shown as by a pair of nuts **28** which, through washers **30**, are screwed on the threaded end of shaft **24** to tightly embrace the bracket **12**. The other washers **32** are slipped on the shaft **24** between the roller **10** and the adjacent nut **28**, providing free rotation of the roller **10** on the shaft **24**.

The manipulating handle **14**, is shown as extending from one side of the frame **12**, and as being formed of rod having a portion **34** which is rotatably secured to the frame **12**, and extends parallel to the roller shafts **24**. Cotter keys **36** pass through portions of the rod-portion **34** on opposite sides of the frame **12**; and inwardly of the cotter keys **36** washers **38** are shown to provide free rotation of the rod-portion **34** and the frame **12**.

The rotational mounting of the handle-portion **34** on frame **12** permits the operator, simply by pushing on the handle **14**, to cause both rollers **10** to engage the painting surface while holding the handle **14** at a convenient angle.

Frame **12** is of a general T-shape, with the shafts **24** mounted adjacent the ends of the crossing leg of the T, and with the handle-rod-portion **34** extending along the axis of the central leg of the T, that T-leg providing spaced locations for supporting the rod-portion **34** which is rotatably carried by the frame **12**.

As best shown in FIG. 2, the frame **12** extends outwardly of the plane of the axes of roller-shafts **24** an amount less than a plane tangent to the outer elements of the cylindrical outline of the rollers **10**, permitting the rollers to both contact the wall to be painted.

Accordingly, it will be seen that this painting device, having a tandem-type roller-arrangement, will automatically achieve a substantially uniform application of paint to a wall or ceiling, without the necessity of stroking the device back and forth; for any portion of the wall or ceiling which shows that paint has been applied to it has automatically been smoothed out during the same stroke as the stroke which supplied the paint. Operational time is saved, and a more uniform application of paint is achieved; yet the manipulation of my device is substantially similar enough to that of conventional paint-rollers, and the effectiveness is sufficiently high, that my device may be operated even by an unskilled workman or householder. The construction is simple and economical; and the maintenance is substantially only that of a conventional paint-roller.

It will thus be seen from the foregoing description of my invention according to the illustrated embodiment, considered with the accompanying drawings, that my invention provides a novel and advantageous painting device, having many desired advantages and characteristics, and accomplishing its intended objects, including those hereinbefore pointed out and others which are inherent in the invention.

It will be understood that modifications and variations may be effected without departing from the scope of novel concepts of my invention; accordingly, my invention is not to be considered limited to the specific form or arrangement herein described and shown.

I claim as my invention:

1. A paint-roller device, comprising, a generally T-shaped carrier having a central leg and a crossing leg extending along a single side of the device, a paint-roller rotatably connected to said carrier along each portion of said crossing leg outwardly with respect to the said central leg so that the rollers are substantially spaced one from the other and with their peripheries in non-contacting spaced relationship, and a handle having a portion extending along said central leg and rotatably connected thereto permitting the carrier and the paint-rollers to rotate with respect to the handle and thus permit both paint-rollers to contact an associated wall regardless of the orientation of the handle with respect thereto.

2. A paint-roller device, comprising a rigid carrier, a pair of shafts mounted on said carrier along parallel axes and at spaced locations thereon, the spacing being substantial so that the peripheries of the below-mentioned paint rollers are in non-contacting spaced relationship, the said shafts being entirely supported at one end by said carrier and free from interconnection at their other end, the shafts being threaded and having nut means threadedly securing said shafts to said carrier, a paint roller rotatably mounted on each of said shafts, and a handle having a portion rotatably connected to said carrier along an axis parallel to the axes of said roller shafts permitting the carrier and the paint rollers to rotate with respect to the handle and thus permit both paint rollers to contact an associated wall regardless of the orientation of the handle with respect thereto.

References Cited in the file of this patent

UNITED STATES PATENTS

2,035,127	Hinton	Mar. 24, 1936
3,015,837	Teall	Jan. 9, 1962

FOREIGN PATENTS

793,449	Great Britain	Apr. 16, 1958
1,092,030	France	Nov. 3, 1954