April 14, 1959 W. E. PARKER 2,881,461

PAINT ROLLER FOR CURVED SURFACES

Filed Oct. 29, 1956

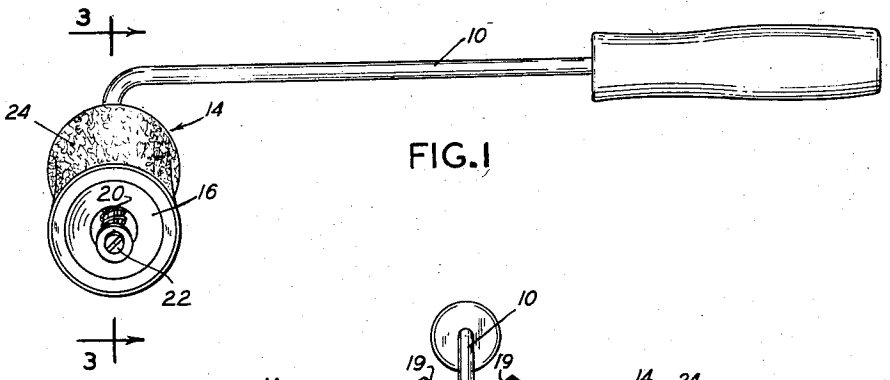


FIG. 1

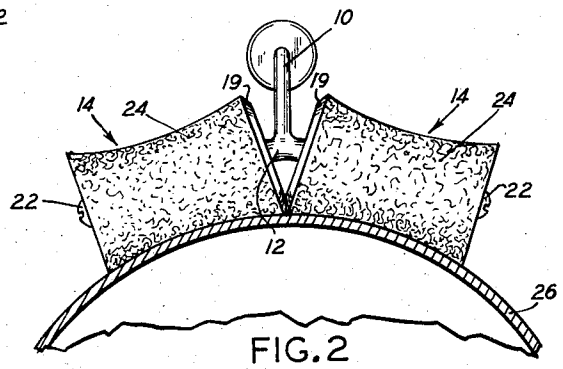


FIG. 2

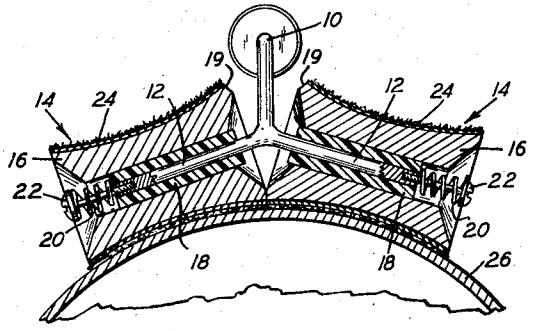


FIG. 3

INVENTOR.
WYNTON E. PARKER
BY
Buckhorn, Cheatham & Blore
ATTORNEYS

United States Patent Office 2,881,461 Patented Apr. 14, 1959

2,881,461

PAINT ROLLER FOR CURVED SURFACES

Wynton E. Parker, Portland, Oreg.

Application October 29, 1956, Serial No. 618,911

1 Claim. (Cl. 15—230)

The present invention relates to a paint applicator and more particularly to a roller type of applicator for applying paint and other coating materials to curved surfaces such as pipes or the like.

It is an object of the present invention to provide a new and improved roller type of applicator by means of which paint or other coating material may be applied with rapidity and ease to the curved surface of a pipe or similar article.

A further object of the invention is to provide a new, improved roller type of article by means of which the application of a smooth, even and complete coating of a coating material may be applied to a curved surface such as on a pipe or the like.

Other objects and advantages of the invention will become more apparent hereinafter.

In accordance with the illustrated embodiment, the present invention comprises a roller type of applicator having two concave rollers arranged to present a substantially continuously curved working area for engaging a similarly curved surface and applying a swath of paint lengthwise of such surface.

For a more complete description of the invention, reference is made to the following specification and accompanying drawings, wherein:

Fig. 1 is a side elevational view of the applicator of the invention;

Fig. 2 is a front elevational view showing the same in contact with a curved surface; and

Fig. 3 is a sectional view taken substantially along line 3—3 of Fig. 1 showing the rollers in contact with a curved surface, similarly to Fig. 2.

The illustrated embodiment of the invention includes a handle **10** to which is secured a roller carrying shaft including a pair of opposite, obliquely extending axle portions **12**, as may be seen in Fig. 3. Mounted on each of the axle portions **12** is a concave roller **14** including a body **16** of suitable material and a core **18** of suitable wear resisting material such as a plastic. The curve of the rollers **14** is such that the intersection of the surface and a plane containing the axis of the roller defines an arc of predetermined radius, as is clearly shown in Fig. 3. The rollers **14** are similarly curved and the axle portions **12** extend at such an angle to one another that when the rollers abut one another, as shown in Figs. 2 and 3, they present a substantially continuous, curved working area extending from the outer end of one of the rollers to the outer end of the other. Speaking geometrically, the axle portions **12, 12** extend at such an angle to one another that a plane containing the axes thereof and intersecting the rollers at their points of contact,

intersects the surface of the rollers along a continuous circular arc. Preferably, as shown clearly in Figs. 2 and 3, the edge portions of the adjacent ends of the rollers are provided with cooperating bevels **19** so that the rollers meet along an extended line of contact, thus stabilizing the movement of the rollers relative to one another.

The rollers **14** are held on the axles **12, 12** and biased towards one another by suitable, resilient means which, in the illustrated embodiment, comprise springs **20** cooperatively arranged between the core **18** and the head of a screw **22** threaded into the axle **12**.

Each of the rollers **14** is provided with a cover or sleeve **24** of suitable, fibrous, paint carrying material.

Figs. 2 and 3 show the rollers with a surface formed to contact a pipe **26** having substantially the same radius as the radius of curvature on the surface of the rollers. Obviously, this is a preferable condition but it will also be obvious that a roller of a given curvature can be used on curved surfaces of slightly different curvature. With the paint applicator of the invention, a smooth, even coat of paint or other coating material may be applied easily and quickly to the surface of curved members such as pipes, spars, masts and the like.

Having illustrated and described a preferred embodiment of the invention, it should be apparent to those skilled in the art that the invention permits of modification in arrangement and detail. I claim as my invention all such modifications as come within the true spirit and scope of the appended claim.

I claim:

A paint applicator for applying paint to a curved surface of a pipe or similar article, said applicator comprising a handle, said handle comprising a rod-like member provided at one end with a grip to be grasped by the hand, a rod-like shaft integral with the opposite end of said handle and comprising a pair of opposite, oblique axle portions extending laterally of said handle member, a pair of concave rollers rotatably mounted one on each of said axle portions, the surface of each of said rollers being curved such that the intersection of the surface with a plane containing the axis of the roller defines an arc of predetermined radius, resilient means biasing said rollers into engagement with one another, said axle portions extending at such an angle to one another that a plane containing the axes of said axle portions and intersecting the points of contact between said rollers intersects said rollers along a substantially continuous arc, the adjacent end surfaces of said rollers being cooperatively beveled so that said rollers meet along an extended radial line of contact.

References Cited in the file of this patent

UNITED STATES PATENTS

439,916	Whittlesey	Nov. 4, 1890
1,486,801	Rousseau	Mar. 11, 1924
2,011,471	Casagrande	Aug. 13, 1935
2,788,539	Santina	Apr. 16, 1957
2,799,884	Bedford	July 23, 1957
2,805,439	Parker	Sept. 10, 1957

FOREIGN PATENTS

80,213	Norway	May 12, 1952
163,299	Australia	June 10, 1955