Jan. 15, 1952 L. W. COOMBS 2,582,861

ROTARY STRIPING WHEEL PAINT STRIPER AND ADAPTER FOR USE WITH COLLAPSIBLE PAINT TUBE CONTAINERS AND THE LIKE

Filed Aug. 4, 1948

Fig. 1.

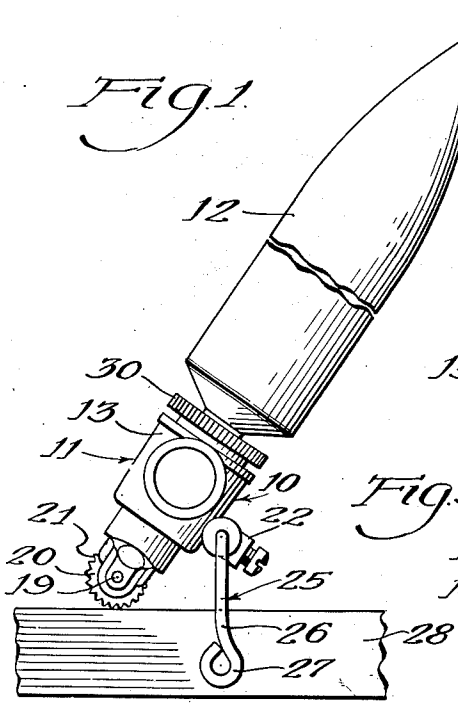


Fig. 4.

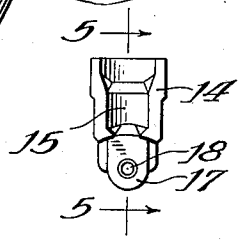


Fig. 5.

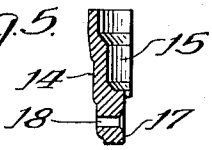


Fig. 3.

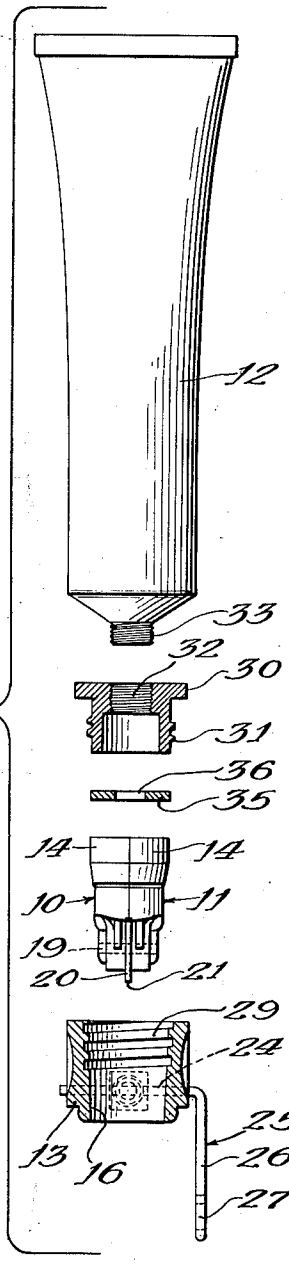


Fig. 2.

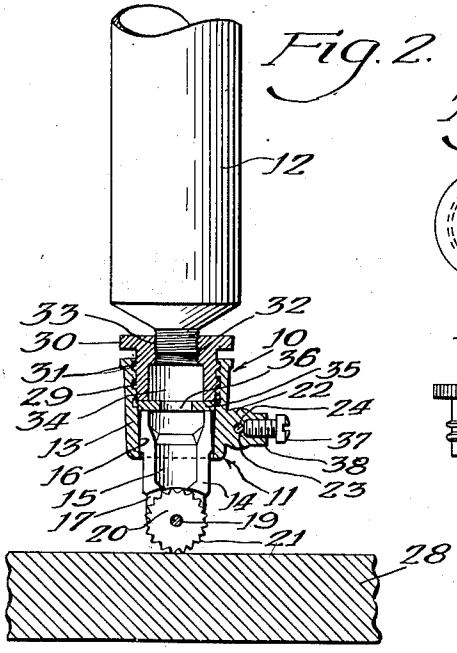


Fig. 6.

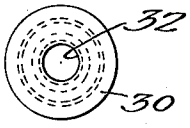
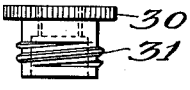


Fig. 7.



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2,582,861

ROTARY STRIPING WHEEL PAINT STRIPER AND ADAPTER FOR USE WITH COLLAPSIBLE PAINT TUBE CONTAINERS AND THE LIKE

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Application August 4, 1948, Serial No. 42,393

6 Claims. (Cl. 15—131.05)

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This invention relates to a paint striper.

The present invention is an improvement upon the paint striper disclosed in United States Letters Patent No. 2,122,858 granted July 5, 1938, to the applicant's intestate, Leslie W. Coombs, deceased, on a "Paint Striper."

It is an object of this invention to provide an improved paint striper which is relatively simple and inexpensive in construction and efficient in use and which is an improvement upon the paint striper disclosed in the aforesaid Letters Patent No. 2,122,858.

An additional object of the present invention is to adapt a paint striper of the character disclosed and claimed in the aforesaid United States Letters Patent No. 2,122,858 to enable such a paint striper to employ in conjunction therewith paint or other similar surface-coating and surface-striping material which is put up and sold in collapsible tubes or containers.

Other and further objects of the present invention will be apparent from the following description and claims and are illustrated in the accompanying drawing which, by way of illustration, shows a preferred embodiment of the present invention and the principles thereof and what are now considered to be the best mode contemplated for applying these principles. Other embodiments of the invention embodying the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claims.

In the drawings:

Fig. 1 is a side elevational view of a paint striper embodying the present invention and showing the same in position of use during the paint-striping operation;

Fig. 2 is a fragmentary view, partly in section and partly in elevation, of the paint striper illustrated in Fig. 1;

Fig. 3 is an exploded view, partly in section and partly in elevation, illustrating the parts of the new paint striper shown in Figs. 1 and 2 and showing a collapsible tube or container adapted to contain paint or other surface-coating and surface-striping material and which is adapted for attachment to the parts of the new paint striper;

Fig. 4 is an elevational view of one of the striping wheel-holding jaws embodied in the new paint striper and illustrating the groove formed therein;

Fig. 5 is a sectional view on line 5—5 in Fig. 4;

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Fig. 6 is a top plan view of an adapter which is embodied in the new paint striper; and

Fig. 7 is a side elevational view of the adapter which is illustrated in Figs. 3 and 6.

The new paint striper is generally indicated at 10 in the drawing and includes a striper wheel-bearing unit or head 11 and a collapsible container or tube 12 which is adapted to contain paint, lacquer, oil, or other suitable surface-coating and surface-striping material.

The striper wheel-bearing unit or head 11 includes a combination clamping and coupling member 13 and a pair of complementary striping wheel-holding jaws 14 each of which is provided on its inner surface with an axially extending bore or groove 15. These two grooves 15 cooperate, when the two striping wheel-holding jaws 14 are in assembled position, to provide a passage 15—15 which functions as an auxiliary reservoir or storage magazine for paint, lacquer, oil, or other suitable surface-coating and surface-striping material which, in the use of the new paint striping device, are delivered thereto by the main storage reservoir or collapsible tube 12.

It will be noted, by reference to Figs. 2 and 3, that there is formed in the combination coupling and clamping member 13 a substantially frusto-conically shaped central passage or seat 16 and that when the two striping-wheel holding jaws 14 are in assembled and complementary relationship they form a generally frusto-conically shaped unit which is projected through and seated in the correspondingly shaped passage or seat 16 in the combination clamping and coupling member 13 (Fig. 2). When so arranged the two striping wheel-holding jaws 14 are held in assembled relationship, as in Fig. 3, by the combination clamping and coupling member 13 which thus serves to clamp the two striping wheel-holding jaws 14 together and in assembled relationship.

Each of the striping wheel-holding jaws 14 is provided at its outer and smaller end with a substantially circular-shaped face or bearing surface 17 and provided in each of the jaws 14, centrally of the corresponding face or bearing surface 17 therein, is a bearing opening 18 which is adapted to receive a correspondingly shaped end portion of a small shaft or pintle 19 on which a striping wheel 20 is fixed. The striping wheel 20 is provided with a substantially flat, and serrated peripheral edge or surface 21 which is adapted to engage the work or surface over which the new paint striper is moved during the paint striping operation.

The combination clamping and coupling mem-

ber 13 has a boss 22 formed thereon and extending through this boss 22 is a cylindrical bore or passage 23. Extending through this bore or passage 23 is an arm 24 of a substantially L-shaped guide member 25. This guide member 25 has an arm 26 which is provided at its outer end with an enlarged and substantially circular-shaped guide portion 27 which is adapted to engage a side edge portion of the work or surface over which the new paint striper is being moved (Fig. 1) so as to guide the new paint striper during the paint-striping operation.

The parts of the new paint-striping device thus far described are substantially similar to corresponding parts shown in the aforesaid United States Letters Patent No. 2,122,858.

However, in the practice of the present invention the upper end portion of the combination coupling and clamping member 13 is internally threaded, as at 29, for the reception of an adapter member 30 the body of which is externally threaded, as at 31, to enable it to be threaded into the internally threaded portion 29 of the combination clamping and coupling member 13.

The adapted member 30 has an internally threaded passage 32 formed therein for the detachable reception of the externally threaded neck portion 33 of the collapsible container or tube 12, as shown in Fig. 2.

The internally threaded passage 32 in the adapter member 30 opens into the interior 34 of the adapter member 30 which, in turn, communicates with a central opening 36 which is formed in a cork or like washer 35 which is arranged between the lower or inner end portion of the adapter member 30 and the upper end edge portions of the striping wheel-holding jaws 14, as shown in Fig. 2.

The use and operation of the paint striping device are as follows: The striping wheel-holding jaws 14 and the striping wheel 20 carried thereby may be assembled in and relative to the combination coupling and clamping member 13 and the guide member 25 may be mounted thereon in the manner shown in the drawing and as illustrated in the aforesaid Letters Patent No. 2,122,858. The washer member 35 may then be arranged in position of use, whereupon the adapter 30 may be threaded into and mounted within the upper portion of the combination coupling and clamping member 13, above the upper edge portions of the striping wheel-holding jaws 14, the adapter member securing the wheel-holding jaws in complementary position within the combination clamping and coupling member. In the particular construction shown, the lower end portion of the adapter member bears against the washer 35. The collapsible tube or container 12 may then be detachably attached to the wheel-bearing assembly or head 11 by screwing the externally threaded reduced neck portion 33 thereof into the internally threaded central passage 32 in the adapter member 30 so that the parts will thus be assembled as shown in Figs. 1 and 2 of the drawing, ready for use.

In the use of the paint striping device the paint, lacquer, oil or other surface-coating and surface-striping material will flow by gravity from the collapsible tube or container 12, through the neck potrions 33 thereof, through the interior or internal passage 32—34 of the adapter member 30, through the central passage 15—15 formed by the complementary grooves 15 in the striping wheel-holding jaws 14, and out of the groove 15—15 through the discharge outlet at the lower end thereof (Fig. 2), onto the substantially flat and serrated peripheral edge 21 of the striping wheel 20 as the latter rotates upon its supporting shaft or pintle 19 over the surface of the work 28 so as to perform the striping operation. During the striping operation the new painting striping device may be guided over the work 28 by means of the guide member 25 which may be clamped in position of use by means of the set screw 37, so that the arm 26 and the substantially circular end portion 27 thereof engage the side edge portion of the work 28, as shown in Fig. 1.

As the paint or other suitable striping material in the collapsible tube or container 12 is used up or consumed the body of the collapsible tube or container 12 may be wound or rolled upon itself and after the collapsible tube or container 12 has been emptied it may be readily removed from the striping wheel-bearing unit or head 11 by detaching the externally threaded reduced neck portion 33 thereof from the internally threaded passage 32 in the adapter member 30, whereupon another and filled collapsible tube or container 12 may be inserted in place thereof. Thus the new paint striping device makes it possible to utilize in conjunction therewith paint or other suitable surface-coating and surface-striping material which is put up and sold in collapsible tubes or containers.

It will thus be seen from the foregoing descrippanying drawing, that the present invention protion, considered in conjunction with the accompanying drawing, that the present invention provides a new and improved paint striping device having the desirable advantages and characteristics, and accomplishing its intended objects, including those hereinbefore pointed out and others which are inherent in the invention.

What is claimed is:

1. A striper comprising, in combination, a collapsible tube container providing a storage reservoir for paint or analogous fluid surface-striping material and including a reduced neck portion having an outlet opening therein, a striping wheel-holding unit including a combination clamping and coupling member having a central opening extending therethrough and providing a seat, a pair of complementary striping wheel-holding jaws arranged in the said opening in the said coupling member and bearing upon the said seat, each of said striping wheel-holding jaws having a groove formed therein in its inner surface and the said grooves cooperating with each other, when the said striping wheel-holding jaws are in assembled position in the said combination clamping and coupling member, to provide a central passage having a discharge outlet at its lower end, and a striping wheel rotatably carried by the said striping wheel-holding jaws and having its peripheral edge portion positioned to receive paint or analogous fluid surface-striping material from the said discharge outlet at the lower end of the said passage and to convey such paint or analogous striping material onto the work, and an adapter member detachably mounted in the said combination clamping and coupling member for detachably attaching the reduced neck portion of the said collapsible tube container to the said combination clamping and coupling member of the said striping wheel-holding unit, and the said adapter member having a centrally arranged passage formed therein for conducting paint or analogous fluid surface-striping material from the outlet open-

ing in the reduced neck portion of the said collapsible tube container through the said central passage in the said striping wheel-holding jaws and through the said discharge outlet at the lower end thereof onto the peripheral edge of the said striping wheel, and the adapter member having contact means at its lower end for securing said wheel-holding jaws in complementary position within the combination clamping and coupling member.

2. A striper as defined in claim 1 in which the said combination clamping and coupling member has an internally threaded upper end portion and in which the said adapter member has an externally threaded surface which is detachably threaded into the said internally threaded upper end portion of the said combination clamping and coupling member.

3. A striper as defined in claim 1 in which the said combination clamping and coupling member has an internally threaded upper end portion and in which the said adapter member has an externally threaded surface which is detachably threaded into the said internally threaded upper end portion of the said combination clamping and coupling member, in which the said reduced neck portion of the said collapsible tube container is externally threaded, and in which the said adapter member has a centrally arranged internally threaded passage formed in the upper end portion thereof adapted for the detachable reception of the said externally threaded reduced neck portion of the said collapsible tube container.

4. A striper comprising a striping wheel-holding unit including a combination clamping and coupling member having a central opening extending therethrough providing a seat, a pair of complementary striping wheel-holding jaws arranged in the said opening in the said combination clamping and coupling member and bearing upon the said seat, each of said striping wheel-holding jaws having a groove formed therein in its inner surface and the said grooves cooperating with each other, when the said striping wheel-holding jaws are in assembled position in the said combination clamping and coupling member, to provide a central passage having a discharge outlet at its lower end, and a striping wheel rotatably carried by the said striping wheel-holding jaws and having its peripheral edge portion positioned to receive paint or analogous fluid surface-striping material from the said discharge outlet at the lower end of the said passage and to convey such paint or analogous striping material onto the work, and an adapter member detachably mounted in the said combination clamping and coupling member for detachably attaching the reduced neck portion of a collapsible tube container to the said combination clamping and coupling member of the

said striping wheel-holding unit, and the said adapter member having a centrally arranged passage formed therein for conducting paint or analogous fluid surface-striping material from the outlet opening in the reduced neck portion of the said collapsible tube container through the said central passage in the said striping wheel-holding jaws and through the said discharge outlet at the lower end thereof onto the peripheral edge of the said striping wheel, and the adapter member having contact means at its lower end for securing said wheel-holding jaws in complementary position within the combination clamping and coupling member.

5. A paint striper as defined in claim 4 in which the said combination clamping and coupling member has an internally threaded upper end portion and in which the said adapter member has an externally threaded surface which is detachably threaded into the said internally threaded upper end portion of the said combination clamping and coupling member.

6. A paint striper as defined in claim 4 in which the said combination clamping and coupling member has an internally threaded upper end portion and in which the said adapter member has an externally threaded surface which is detachably threaded into the said internally threaded upper end portion of the said combination clamping and coupling member, in which the said reduced neck portion of the said collapsible tube container is externally threaded, and in which the said adapter member has a centrally arranged internally threaded passage formed in the upper end portion thereof adapted for the detachable reception of the said externally threaded reduced neck portion of the said collapsible tube container.

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By HOWARD J. JOHNSON,
Assistant Trust Officer.

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