Oct. 4, 1949. B. L. DEAN 2,483,814

WALL PAINTING MACHINE

Filed May 11, 1945 2 Sheets-Sheet 1

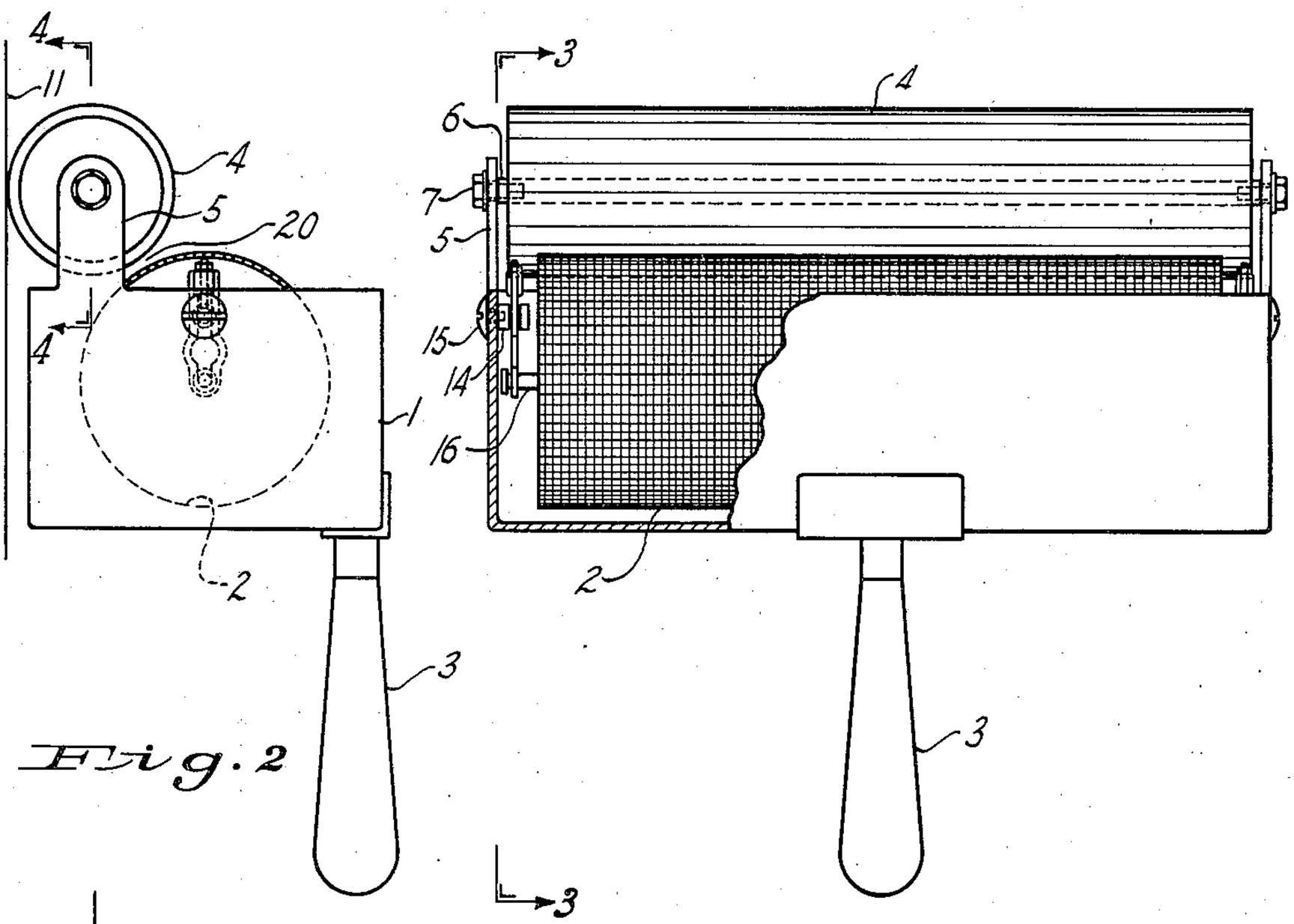

Fig. 2

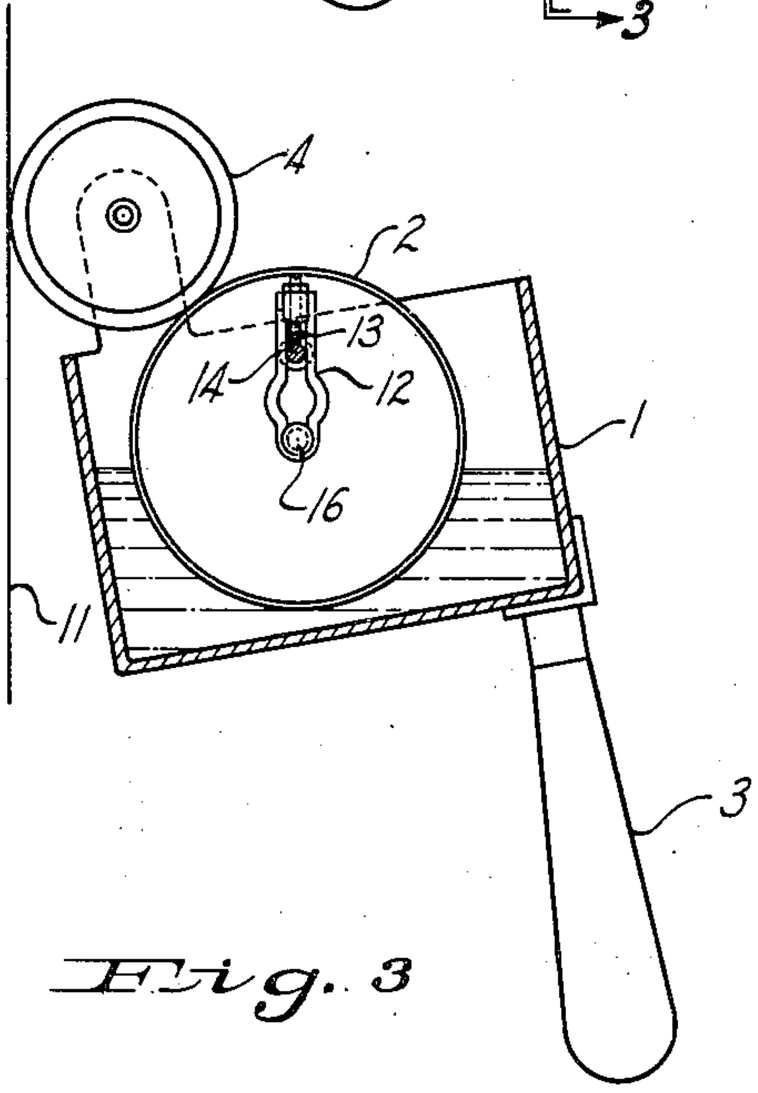

Fig. 3

Fig. 1

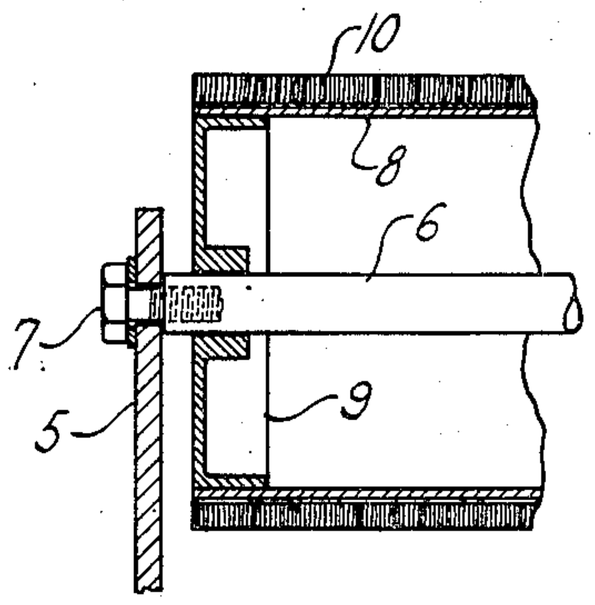

Fig. 4

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WALL PAINTING MACHINE

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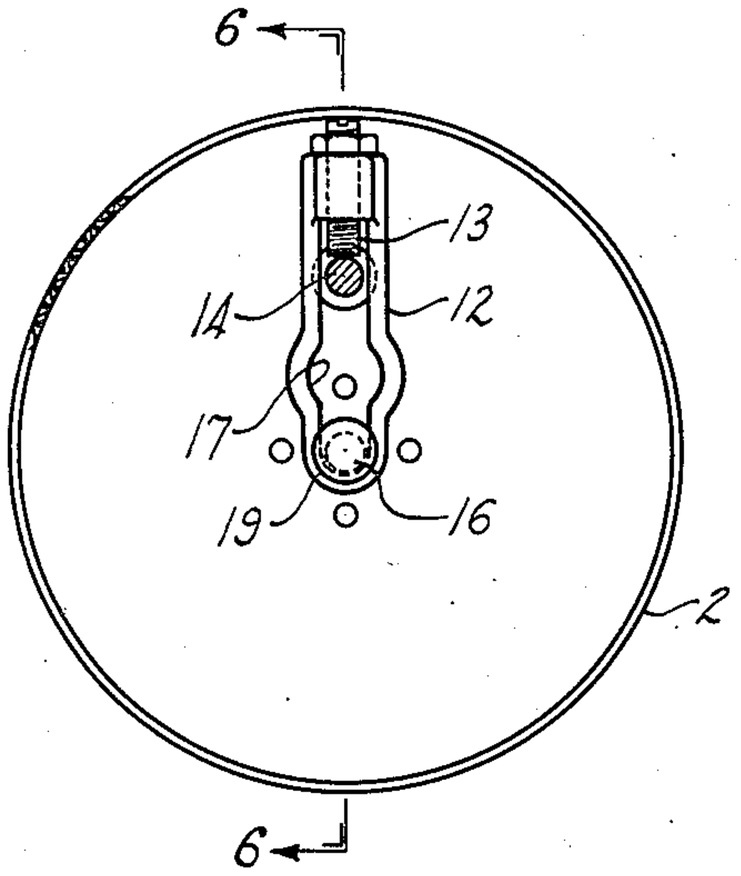

Fig. 5

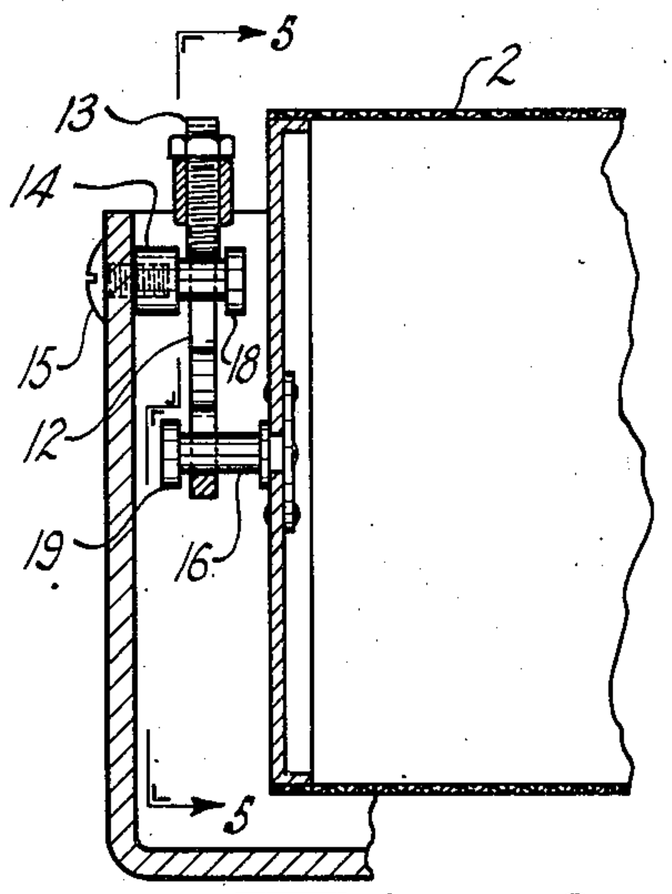

Fig. 6

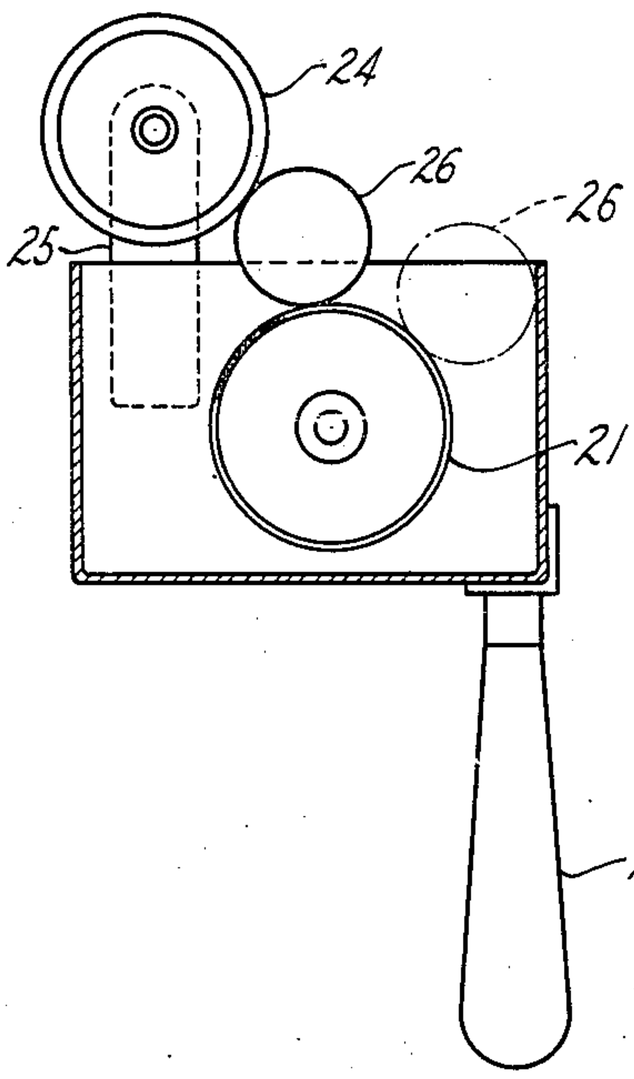

Fig. 7

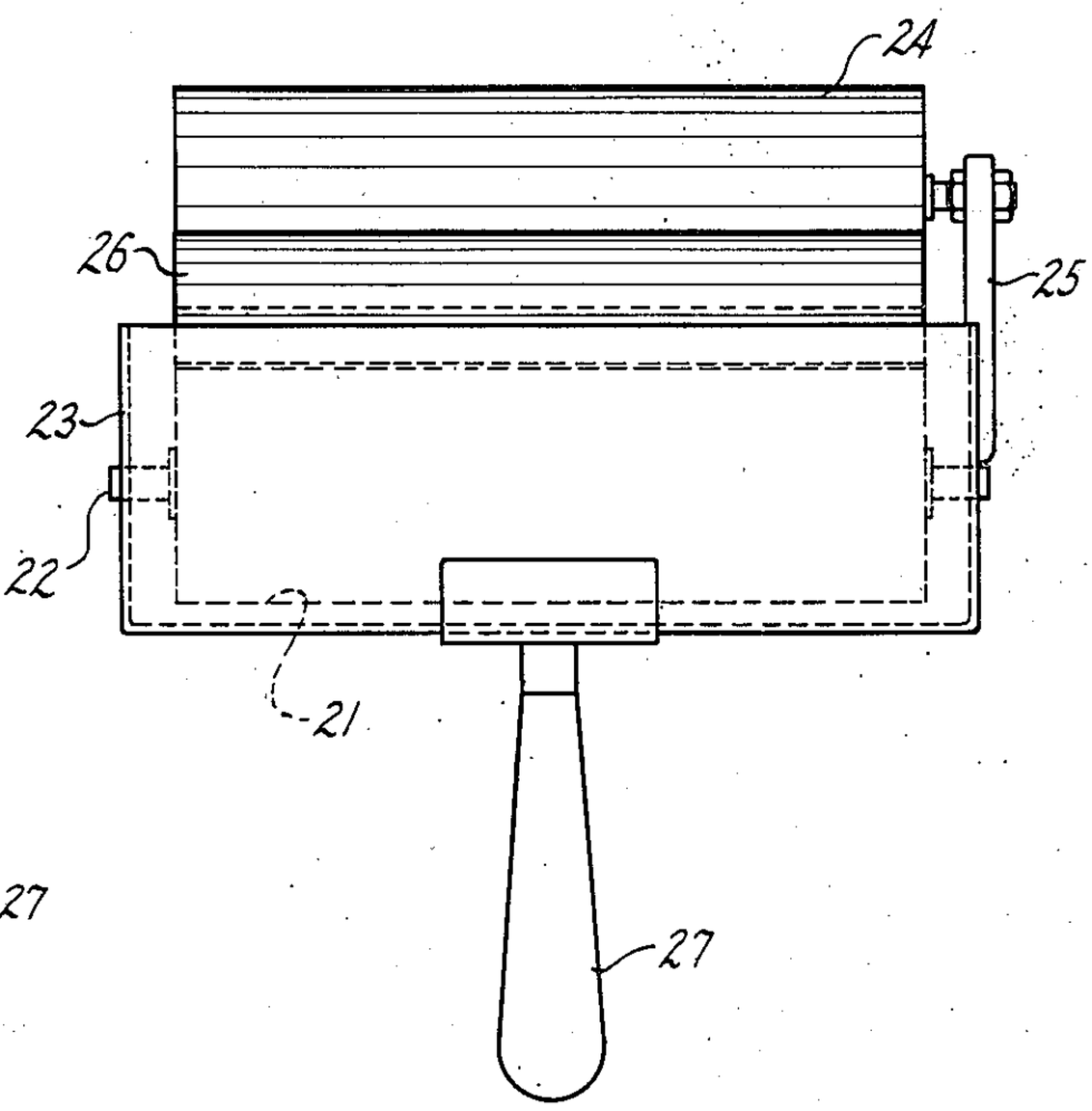

Fig. 8

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Patented Oct. 4, 1949 2,483,814

UNITED STATES PATENT OFFICE

2,483,814

WALL PAINTING MACHINE

Byron L. Dean, Pittsburgh, Pa.

Application May 11, 1945, Serial No. 593,137

1 Claim. (Cl. 91—62.5)

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This invention relates to new and useful improvements in paint machines, more particularly to a manually operable paint machine having an applicator roll and means for contacting said roll at will with a paint feed roll.

It is among the objects of the invention to provide a paint machine of simple, compact construction which shall be adapted to feed the paint during the continuous application thereof to a wall.

Another object of the invention is to provide a paint machine embodying means for feeding paint to an applicator roll as desired.

These and other objects of the invention will become more apparent from a consideration of the accompanying drawings constituting a part hereof, in which like reference characters designate like parts, and in which

Fig. 1 is a front elevational view, partially cut away, of a paint machine embodying the principles of this invention;

Fig. 2 an end elevational view thereof;

Fig. 3 an end elevational view, partially in section, taken along the line 3—3, Fig. 1, of the paint machine of Figs. 1 and 2 in tilted position;

Fig. 4 an enlarged detail, partially in section, of a portion of an applicator roll;

Fig. 5 an end elevational view of the feed roll and mounting bracket therefor taken along the line 5—5, Fig. 6;

Fig. 6 a vertical cross-sectional view of a portion of the feed roll and paint container taken along the line 6—6, Fig. 5; and

Figs. 7 and 8 an end elevational view, partially in section and a front elevational view, respectively, of a modified form of paint machine embodying the principles of this invention.

With reference to Figs. 1 to 6 inclusive of the drawing, the structure therein illustrated comprises a container 1 for paint which may be maintained at any liquid level above the bottom of a feed roll designated by the reference character 2 to maintain contact therewith, 3 is a handle for manipulating the container 1. An applicator roll 4 is mounted on a bracket portion 5 of the container 1 and is rotatable on a shaft 6 secured by the nut 7 on said bracket. As shown in Fig. 4, the applicator roll may be a cylinder 8 of lightweight material, such as sheet metal, aluminum and the like, having hubs 9 journaled on the shaft 6, the cylinder 8 being provided with a surfacing material 10 such as felt, woven carpet material, sponge and the like, depending upon the kind of surface finish desired in its use on a wall which in the drawing is designated by the

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reference numeral 11 in Figs. 2 and 3. As shown in Fig. 2, the feed roll 2 is out of contact with the applicator roll and is shown in contact therewith in Fig. 3. The engagement and disengagement of the feed roll with the applicator roll is effected by merely tilting the container 1 or handle member and returning it to the normal position as shown in Fig. 2. By this movement feed roll 2 engages and disengages the applicator roll 4 by virtue of its mounting by a bracket 12 that is pivotally supported on a set screw 13 resting on a stud shaft 14 that is secured by a screw 15 to the side wall of the container. Bracket 12 is provided with a slotted end for receiving the shaft 16 of the feed roll 2 in the manner shown in Figs. 1 to 3 and as is more clearly shown in Figs. 5 and 6.

In Fig. 5, which is an enlarged view of the bracket 12, it will be seen that an enlarged portion 17 is provided which clears the heads 18 and 19 of the stud 14 and shaft 16 respectively. To assemble the feed roll on the container, the heads 19 of the end shafts 16 are slipped through the enlargment 17 and the roll is permitted to drop in the slotted portion of the bracket to rest on the end of the bracket as shown. Brackets 12 are then raised with their openings 17 in register with the heads 18 of stud shaft 14. They are then slipped over and lowered so that the set screws 13 rest upon the stud shafts 14. Set screw 13 may be adjusted to vary the space designated by the numeral 20 in Fig. 2 between the feed roll and applicator roll when the container is in its normal position.

The operation of the paint machine shown in Figs. 1 to 6 is as follows. With the container 1 charged with paint, such as any water, oil paint or enamel, glue size or other liquids to be applied to a wall, to a level to contact the feed roll 2, the handle is tilted as shown in Fig. 3 to bring the feed roll 2 in contact with the applicator roll by action of gravity. By moving the container vertically to cause the applicator roll 4 to roll against the wall surface 11 paint from the container will be fed to the surface of the applicator roll and transferred by contact to the wall surface 11. The container may then be tilted to the normal position shown in Fig. 2, which moves the feed roll 2 out of contact with the applicator roll and the applied coating may then be worked in by continued rolling of the applicator roll without supplying additional coating material. To cover additional surface, the container 1 is again tilted as shown in Fig. 3 to effect contact of the feed roll with the applicator roll to feed the coat-

ing material to the latter until it is again desired to work in the applied coating by manipulating the applicator roll over the applied surface out of contact with the feed roll.

In a modified form of the device shown in Fig. 7 the feed roll **21** is journaled by shafts **22** in the side walls of the container **23**. The applicator roll **24** mounted on a bracket **25** is also fixed relative to the feed roll **21** and an idle roll **26** is interposed between the feed roll and applicator roll to effect contact therewith to transmit the coating material from the feed roll **21** to the applicator roll **24** when desired. The idle roll **26** is confined between the walls of the reservoir as shown in Figs. 7 and 8. In Fig. 7 the intermediate roll **26** is shown in contact and the dotted-line position indicates the out of contact position of the intermediate roll. By flicking the handle member **27**, intermediate roll **26** may be brought into or out of contact with the applicator roll while always maintaining contact with the feed roll **21**. This is a more simplified construction of the paint machine but functions on the same principle as the device described in connection with Figs. 1 to 6 to allow use of the applicator roll while out of engagement.

It is apparent from the above description of this invention that paint machines made in accordance therewith provide a simple and expedient means for continuously coating walls. By selecting surface materials of different texture for the applicator rolls, different finishes on wall surfaces may be obtained. When utilizing a coarse or spongy material a stipple effect may be produced, and when employing felt or carpeting materials a finer surface texture is available if cheese cloth or other textile materials are used on the surface of the applicator roll.

Although several embodiments of the invention have been herein illustrated and described, it will be evident to those skilled in the art that various modifications may be made in the details of construction without departing from the the principles herein set forth.

I claim:

In a machine for applying liquid coating to a wall, a container for liquid coating, a feed roll in contact with said liquid, an applicator roll for applying the coating to a wall, and means operable in one position of said machine for connecting the surfaces of said rolls to transfer the coating material from the feed roll to the applicator roll and thence to the wall, said means comprising a plurality of hanger brackets pivotally mounted on the inner walls of said container having journals for receiving the ends of the feed roll whereby the feed roll is suspended vertically in the container and adapted to be swung into and out of contact with the applicator roll by tilting the container.

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