June 25, 1929. D. MORRIS 1,718,757

BRUSH RING MECHANISM FOR PIPE PAINTING

Filed April 28, 1928 2 Sheets-Sheet 1

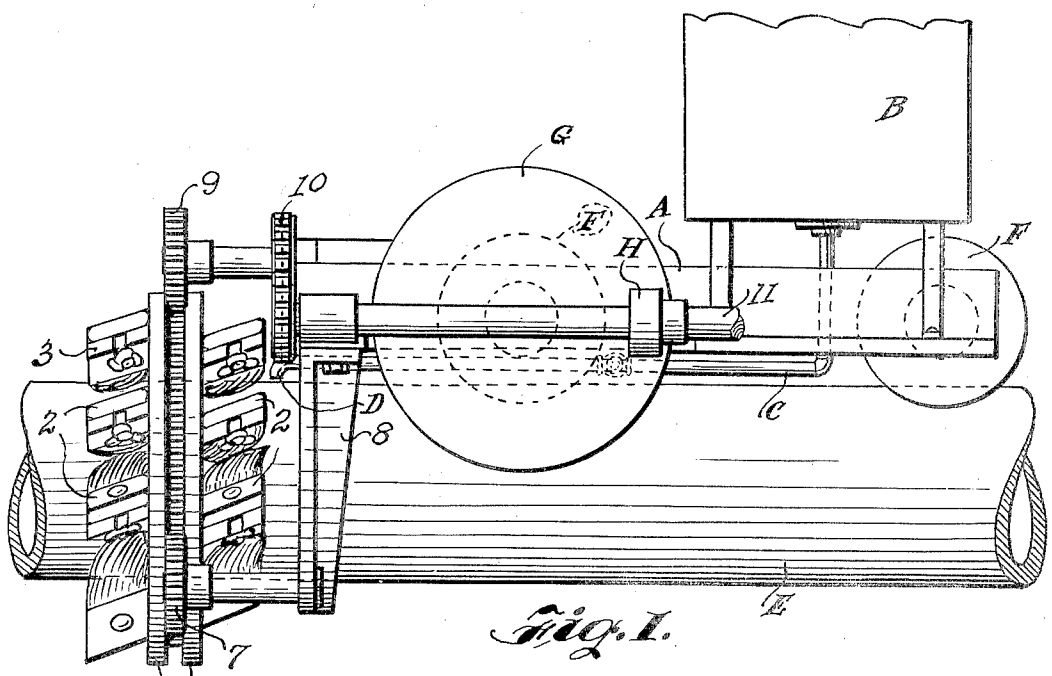


Fig. 1.

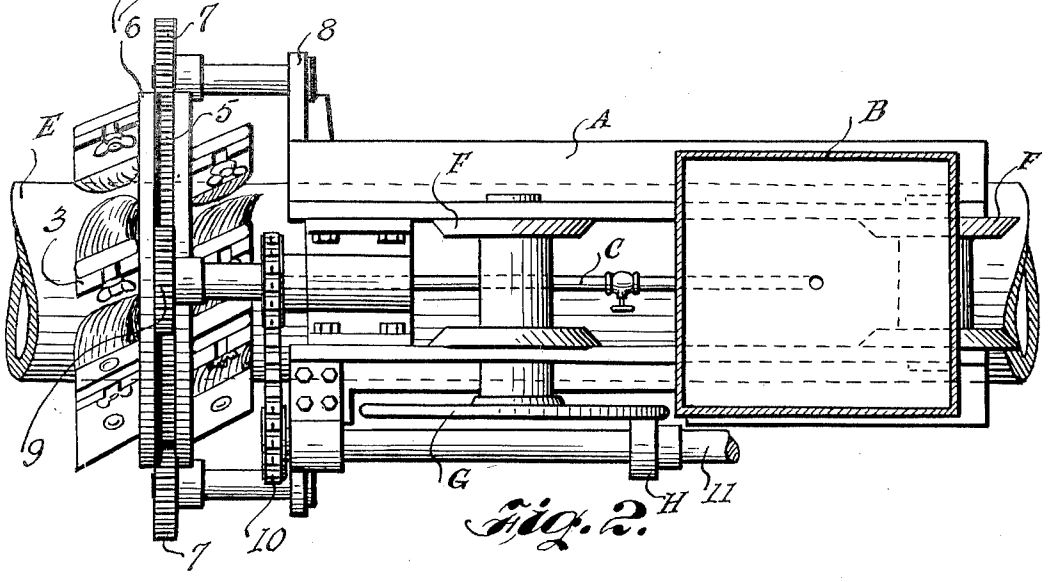


Fig. 2.

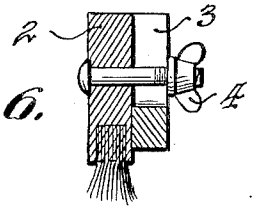


Fig. 6.

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BRUSH RING MECHANISM FOR PIPE PAINTING

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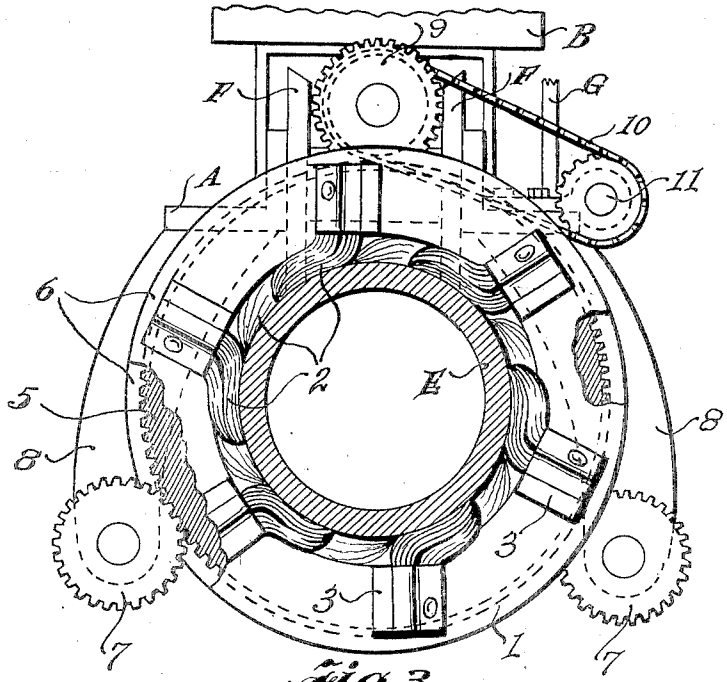


Fig. 3.

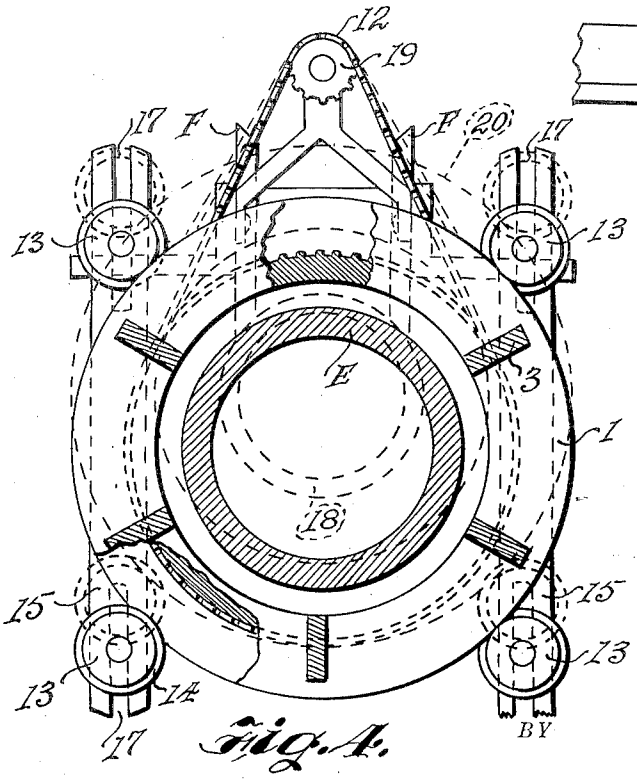


Fig. 4.

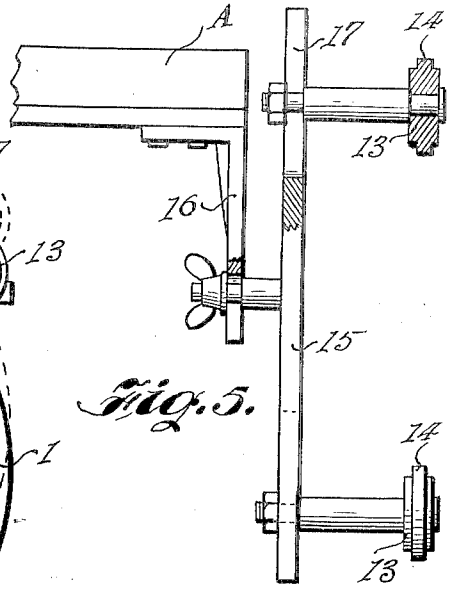


Fig. 5.

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UNITED STATES PATENT OFFICE.

DWIGHT MORRIS, OF DALLAS, TEXAS, ASSIGNOR TO RALPH EMERSON JANES, OF DALLAS, TEXAS.

BRUSH-RING MECHANISM FOR PIPE PAINTING.

Application filed April 28, 1928. Serial No. 273,616.

This invention relates to improvements in devices for painting pipes or other elongated cylindrical objects.

At present paint or other liquid substances are applied to pipes by hand as by swabbing with cloth or by brushes, which is a slow and difficult method to obtain a uniform coating, also resulting in wastage of materials. In order to overcome these disadvantages I have provided a machine which will paint pipe quickly, economically and expeditiously and with a minimum waste of liquid used and will also apply the coating with much more uniformity.

The principal object of my invention is to provide a device for painting pipes which will accomplish this purpose as thoroughly and efficiently as when done by hand and much more expeditiously, thus effecting a great saving in time and labor.

With the above and other objects in view, the invention consists in the novel construction and the combination of parts hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevational view of the machine;

Fig. 2 is a top plan view;

Fig. 3 is an end view of Fig. 1 or Fig. 2;

Fig. 4 is an end view similar to Fig. 3, but showing a modified form of chain drive for brush rings instead of gear drive as shown in Fig. 3;

Fig. 5 is a detail view of bracket that carries the guide rollers shown in Fig. 4; and

Fig. 6 is a detail of lug on face of brush ring to which brush is fastened.

Like characters of reference indicate like parts throughout the several views shown.

1 indicates a ring carrying a plurality of brushes 2 on both back and front faces of said ring 1. Brushes 2 are fastened to lugs 3 that project from the face of the ring, said lugs being slotted to permit adjustment of the brushes to suitable operable position. A wing-nut 4 is provided to hold brushes 2 in position when proper adjustment has been obtained. The gear 5 forms a part of the brush-ring 1 but is smaller than the periphery of the outer flange 6. Idle gears 7 are suspended from the carriage A by brackets 8. Brush-ring 1 is suspended by and travels on said gears 7 while the gear 9 drives the ring 1 through the instrumentality of chain 10, the main drive shaft 11 being actuated by a motor of conventional type. The paint from tank B is carried by the pipe C to a point D directly in front of the brushes 2, where it is discharged onto the pipe E.

In operation, brushes 2 revolve around the pipe E, and are at the same time carried forward by the movement of the carriage along the pipe E, spreading the paint. Carriage movement on the rollers F is effected by the frictional wheel G attached, respectively, to the shaft of the rollers F and the friction roller H, said friction wheel H being fixedly secured to main drive shaft 11.

As shown by Figure 4, the chain 12 drives the brush-ring 1 which is in frictional engagement with and supported by rollers 13, said rollers having a center flange 14, whereby they are maintained in operative position as regards brush-ring 1. Rollers 13 are carried by brackets 15 suspended from carriage A by extension 16. A slot 17 in bracket 15 permits rollers 13 to be adjusted to any desired vertical position, the object of this adjustment being to center a smaller pipe in brush-ring 1, as shown by dotted lines 18, without changing the size of carriage rollers F which is necessary when brush-ring 1 is driven by gear 9 through frictional wheel G, frictional roller H and main drive shaft 11, due to the loss of friction between frictional wheel G and frictional roller H. Driving sprocket 19 being in fixed position, it is clear that several links must be removed from chain 12 in order to shorten same when brush-ring 1 is raised to center the smaller pipe, as indicated by dotted lines 20.

To facilitate the work and to meet different working conditions, a plurality of rings 1 containing brushes 2 may be provided, and said rings may revolve in the same or opposite direction; and also the position of the brushes on said rings may be altered to obtain better results under varying conditions.

From the foregoing description considered in connection with the accompanying drawings, a clear and comprehensive understanding of the construction, operation and advantages of the invention is made apparent; but while a device has been shown and described as embodying a specific structure, yet it is to be understood that such changes may be made in

said structure as do not constitute a departure from the spirit and scope of the invention as set forth.

What I claim is:

A pipe painting device comprising a carriage; means for supporting and driving said carriage on a pipe; a revolving member carried by said carriage and surrounding the pipe; a plurality of brushes carried by said revolving member; means of centering pipe in said revolving member; means of driving said revolving member; and means of delivering paint to said brushes, said pipe centering means comprising brackets suspended from said carriage and provided with slots therein and revolving-member-engaging rollers rotatable on shafts slidably adjustable in said slots.

In testimony whereof I affix my signature.

DWIGHT MORRIS.