

J. B. ROOT.  
Apparatus for Painting Pipes and Tubes.  
No. 221,939.                      Patented Nov. 25, 1879.

*Fig. 1.*

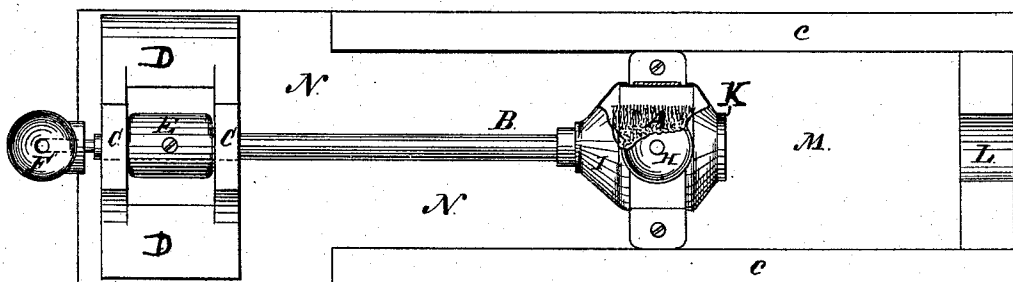


*Fig. 2.*

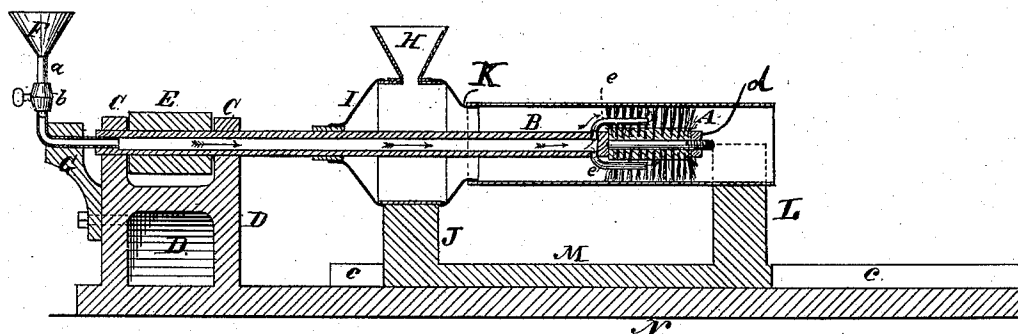
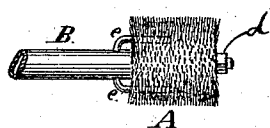


*Fig. 3.*



*Witnesses:*

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JOHN B. ROOT, OF NEW YORK, N. Y.

## IMPROVEMENT IN APPARATUS FOR PAINTING PIPES AND TUBES.

Specification forming part of Letters Patent No. **221,939**, dated November 25, 1879; application filed September 13, 1878.

*To all whom it may concern:*

Be it known that I, JOHN B. ROOT, of the city, county, and State of New York, have invented a new and useful Improvement in Machines for Painting Pipes and Tubes, of which the following is a specification.

The object of the invention herein described is to provide an apparatus or machine by means of which lengths or sections of pipes and tubes can be thoroughly and expeditiously coated with paint or other liquid material upon their interiors.

The construction and operation of the apparatus are illustrated in the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a plan or top view of the apparatus. Fig. 2 is a vertical section of the same through the line *x x* of Fig. 1, the carrying-table having been moved forward from the position shown in Fig. 1; and Fig. 3 is a detail view of the brush and attachment.

The various working parts of the apparatus are designated and described as follows, viz:

A represents the brush. This is made of bristles or other suitable material for holding and distributing the paint as it is revolved in the pipe. It is mounted upon one end of a pipe, B, which is journaled in the wings C C of the fixed standard D.

E is a pulley, made fast to the pipe B between the wings C C. F is a paint-reservoir, raised up to a sufficient height above the level of the pipe B to cause the paint to flow by its gravity through the pipe to the brush A. A small pipe, *a*, provided with a stop-cock, *b*, connects the bottom of the reservoir F with the end of the pipe B. The pipe *a* is supported by passing through a bracket, G, attached to the side of the standard D.

H is a funnel resting above the protector I. This is convenient for use in painting short sections of pipe which require only a single brushful of paint, and it may be allowed to remain in place without inconvenience when the reservoir F is in use for long sections. The protector, I is a cylindrical-shaped box through which the pipe B passes, and it is fixed to the standard J. It surrounds the brush before it enters the pipe to be painted, and receives and

retains the paint which drips or is thrown from the brush.

K is a circular rim projecting from the end of the protector I nearest the brush, and affords a rest upon which one end of the pipe or tube to be operated upon is centered. L is another standard, having its central part hollowed out for the pipe to rest in. Both the standards J and L are secured to a table, M, which slides forward and backward upon the platform N between the ways *c c*.

The brush A is secured to the end of the pipe B by means of a nut, *d*, and can readily be exchanged for brushes of different sizes, for use in pipes of larger or smaller diameter. Two branch pipes (shown in Fig. 3 and designated by *e e*) lead from the main pipe B to the brush, and are well adapted to deliver the paint, and do not interfere with the exchange of brushes.

The circular rim K can be so fitted to the protector I that it can easily be removed and others of larger or smaller size be substituted therefor.

The apparatus is operated as follows: The table being in the position shown in Fig. 1, the reservoir F supplied with paint, and the brush revolved by means of a band passing around the pulley E, one end of the pipe or tube to be painted is placed over the rim K, the other end or body resting in the hollow of the standard L, and the table carrying the pipe or tube and the standards J and L is pushed forward toward the reservoir F. The table can conveniently be advanced by the workman who handles the pipe walking forward, and at the same time pressing upon the end of the pipe, and the sections of pipe are thus caused to traverse throughout their entire lengths over the revolving brush. During the advance of the pipe the brush is plentifully supplied with paint, which is delivered by the small pipe *a* into the pipe B and flows through the pipe to the brush A.

By the use of this machine pipes of long sections can be thoroughly coated with paint or other desired liquid material at a great saving of time, labor, and expense.

When the funnel H is used in painting short sections of pipe the operation is substantially

the same. In this case, however, only a small quantity of paint is introduced upon the brush through the funnel H.

It is obvious that in the place of the construction herein described the sections of pipe might be revolved and a longitudinally-reciprocating brush used to effect the same results.

What is claimed as new is—

1. In a pipe-painting machine, the combination of the following elements: a revolving brush, a table or carriage for supporting the pipes, and adapted to be moved backward and forward in the manner described, whereby the brush will enter the pipe, the hollow tube B, provided with the branch delivery-pipes *e e*,

for supplying paint to the brush, and a reservoir for feeding the paint to the tube B, the arrangement and operation of the parts being as above set forth.

2. In combination with the revolving brush and reciprocating table, the protector I, mounted upon and moving with such table, substantially as and for the purpose set forth.

3. In combination with the brush A, pipe B, and reservoir F, the delivery-pipes *e e*, as shown and described.

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Witnesses:

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