

E. Dayton.

Pipe Coating Apparatus.

N^o 96313.

Patented Nov. 2. 1869.

Fig. 1.

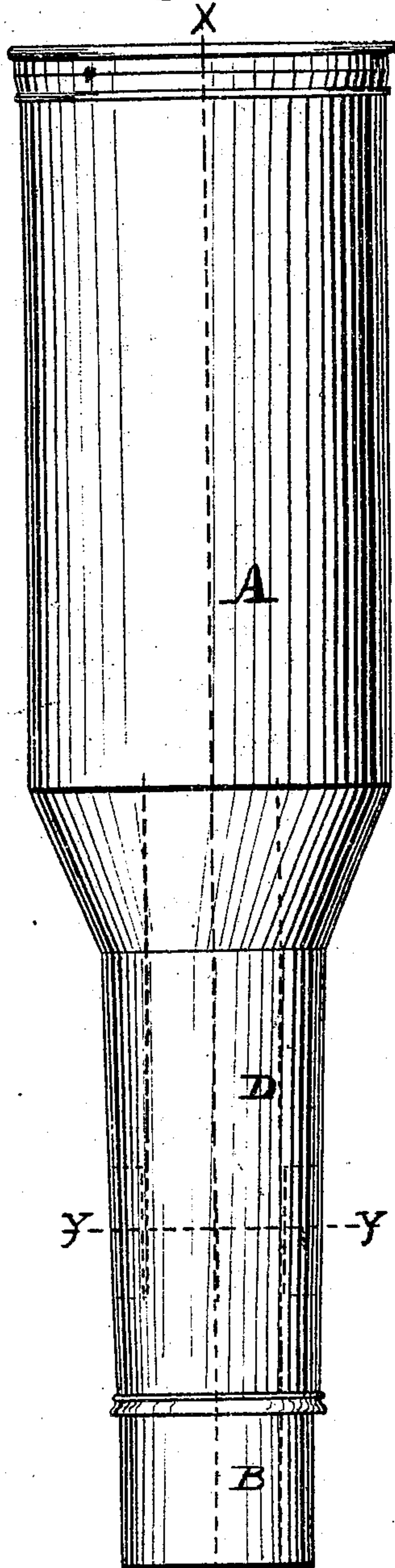


Fig. 2.

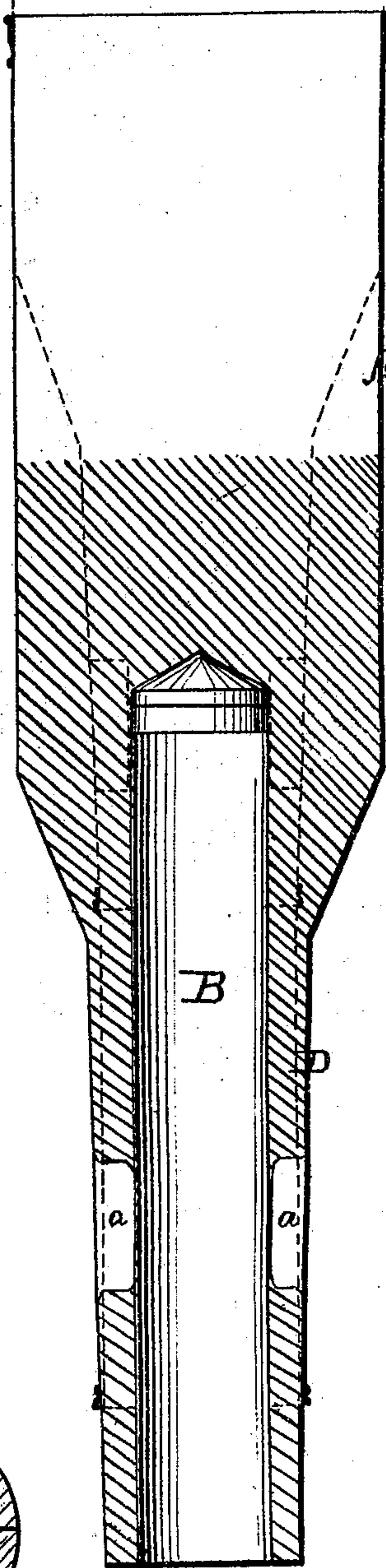
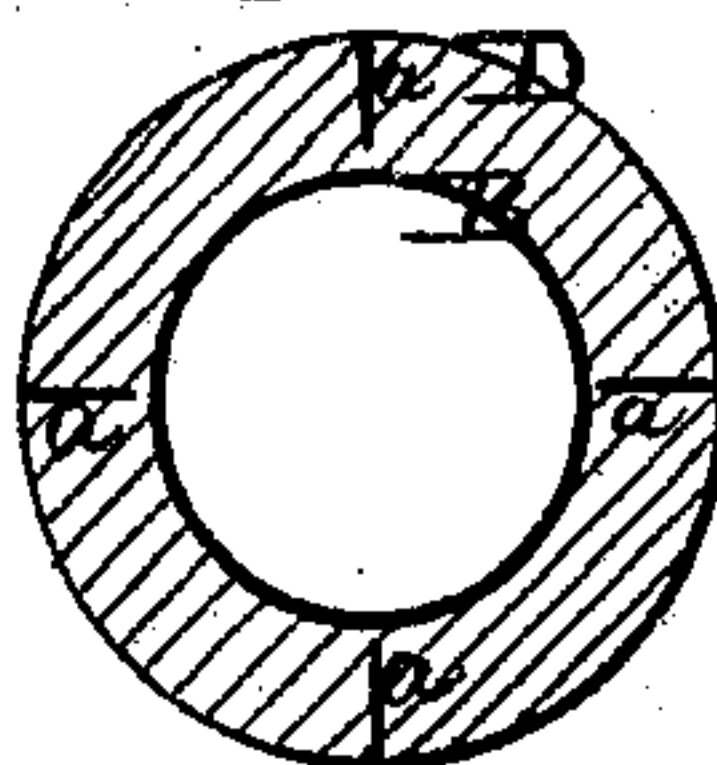


Fig. 3.



Witnesses: x

James M. Smith

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Inventor:

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UNITED STATES PATENT OFFICE.

EDWIN DAYTON, OF MERIDEN, CONNECTICUT.

IMPROVED APPARATUS FOR COATING CEMENT PIPES.

Specification forming part of Letters Patent No. 96,313, dated November 2, 1869.

To all whom it may concern:

Be it known that I, EDWIN DAYTON, of Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improved Apparatus for Coating Cement Water-Pipes; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a side view of my improved apparatus, showing the finished pipe projecting a short distance therefrom. Fig. 2 is a longitudinal section of the same, taken through line *x x*, showing the position of the cylinder when it has traveled nearly the entire length of the pipe. Fig. 3 is a cross-section taken through line *y y*, showing the radial guides, and the manner in which the pipe is held while being coated.

My invention relates to an improved device for coating or covering the outside of pipes commonly called "cement water-pipes;" and consists of a cylinder or barrel terminating in a funnel-shaped tube, through which the pipe-section is passed. Radial guides are placed longitudinally upon the inner surface of the funnel, to keep the pipe and cylinder in such relative position that the said pipe may be evenly coated.

To enable others skilled in the art to make and use my improvement, I will proceed to describe the construction and operation of the same with reference to the accompanying drawings.

A is a cylinder or barrel, in which the cement or substance with which the pipe is to be coated is contained. B is a section of pipe to be operated upon, which passes through the cylinder, and is held in its lower or funnel-shaped end, D, and kept equidistant from the sides of the said funnel by means of the projections or guides *a a*. These guides are attached radially to the inner surface of the funnel, as shown in Figs. 2 and 3, and extend inward as near to the pipe B as may be without impeding its progress by contact.

I do not confine myself, however, to the use of these projections, as I am aware that pipe may be coated without them; but I prefer their use, as they give a uniformity to the thickness of coating that could not be obtained in any other way.

In operating my improvement, the pipe-section is placed in position in the tube or cylinder, with its lower extremity in line with that of the funnel. The opposite extremity of the pipe is closed, to prevent its being filled with cement. The cement is placed in the cylinder, and when a sufficient amount of pressure has been attained the cylinder is slowly raised by some mechanical means, the pipe remaining stationary; or the pipe may be passed through while the cylinder remains stationary.

The projections or guides *a a* guide the cylinder as it rises, as shown in Fig. 2, and cause an even coating to be laid upon the pipe. The slight incline or conical shape of the funnel end of the cylinder causes a pressure upon the cement and hardens it, making it adhere to the pipe, and also closing the cuts made by the projections *a a*.

As the funnel rises, it also gives a smoothing or drawing stroke to the outer surface of the cement, so that when the pipe comes from the machine it is solidly and smoothly covered with cement to a uniform thickness throughout its entire length.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

The within-described apparatus for covering or coating the outside of cement water-pipes, by passing them through a funnel-shaped tube, either with or without the internal guides, substantially as herein shown and described.

This specification signed and witnessed this 31st day of July, 1869.

EDWIN DAYTON.

Witnesses:

GEO. W. SMITH,
RUFUS H. SANFORD.