

JAMES S. PIERSON.

Improvement in Water and Sewer Pipes.

No. 124,624.

Patented March 12, 1872.

Fig. 1

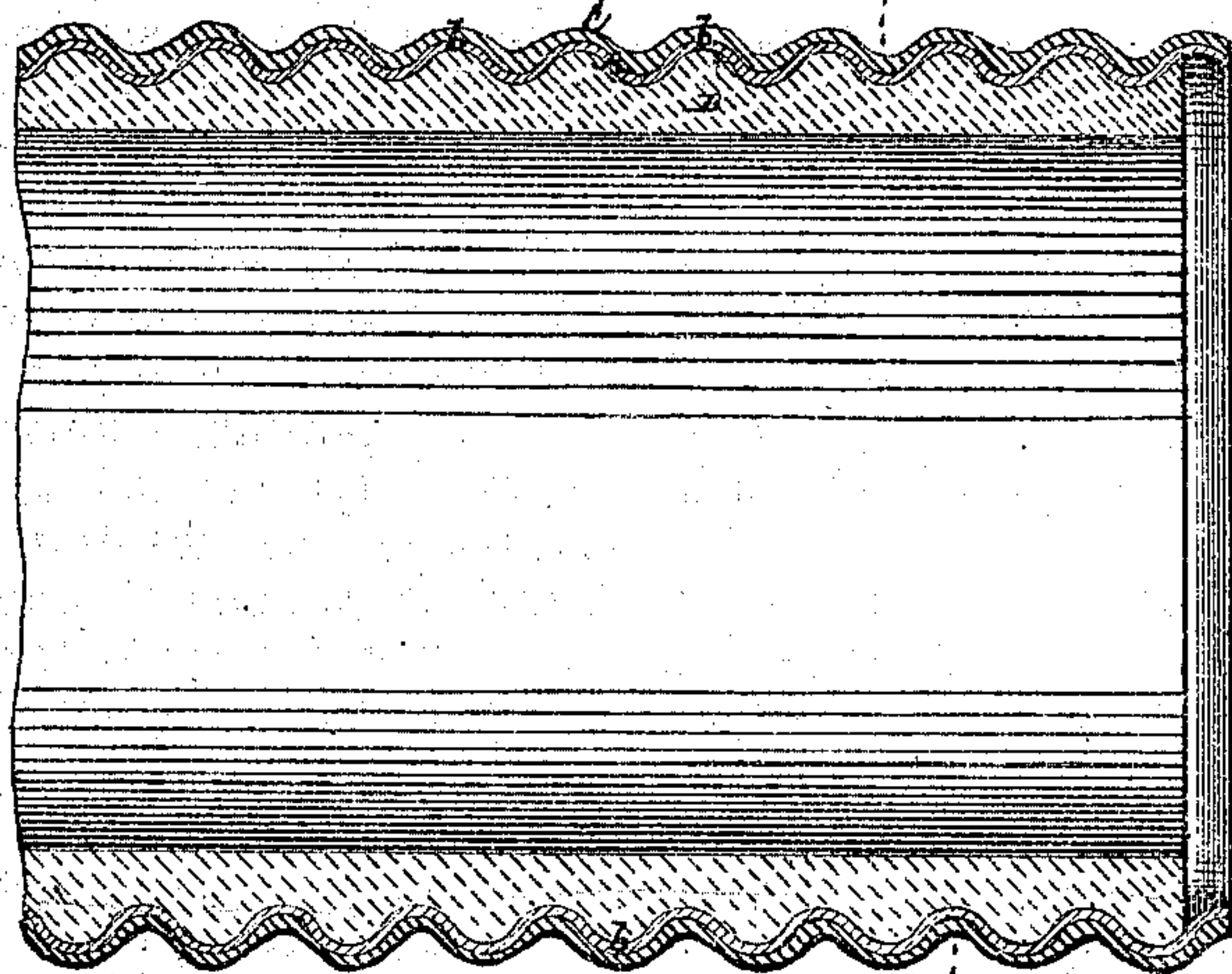
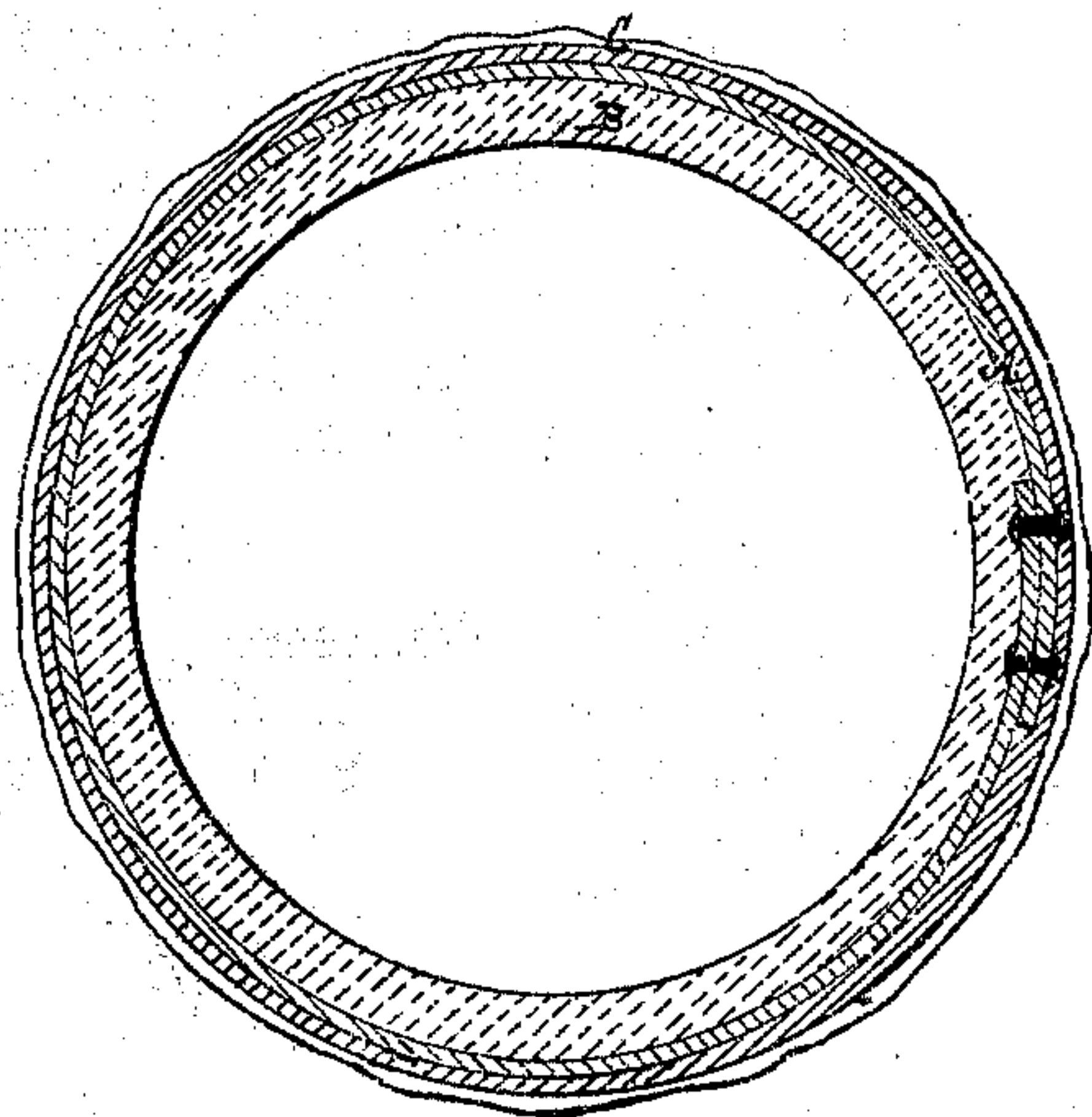


Fig. 2



Witness
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JAMES S. PIERSON, OF NEW YORK, N. Y.

IMPROVEMENT IN WATER AND SEWER PIPES.

Specification forming part of Letters Patent No. 124,624, dated March 12, 1872.

To all whom it may concern:

Be it known that I, JAMES S. PIERSON, of the city, county, and State of New York, have invented a new and useful Improvement in Water and Sewer Pipes; also applicable for conveying other fluids and gases; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, and in which—

Figures 1 and 2 represent a longitudinal and transverse section of a single length or section of pipe constructed in accordance with my improvement.

Similar letters of reference indicate corresponding parts in both figures of the drawing.

Although the pipe which constitutes my improvement is mainly designed for conveying water and sewerage, it may be used to advantage for various fluids or gases. It is preferred, however, here to identify the improvement with water pipes or mains for use either above or under ground. The invention consists in a corrugated sheet-metal pipe, lined with hydraulic cement on its interior, and coated externally with asphalt or other water-proof material to protect it from corrosion on the outside, while the hydraulic cement not only protects the sheet metal from corrosion internally, but gives a smooth or clear finish to the interior, and is not liable to be eaten away by acids or otherwise injured by chemical action, and imparts no obnoxious flavor to the water or fluid passing through the pipe. The corrugations of the sheet-metal body are annularly arranged, and, in addition to impart-

ing strength and relieving the rivets which secure the seam of strain, serve to hold the lining of hydraulic cement to its place. A pipe thus made is at once cheap, light, and capable of sustaining a very heavy pressure.

Referring to the accompanying drawing, A represents the sheet-metal body of the pipe, formed with a continuous succession of annular corrugations, *b*, and united by rivets at the seam, where its one longitudinal edge overlaps the other. B is the lining, of hydraulic cement, which is applied to the body in the usual or any suitable manner of applying cement to cylindrical surfaces; and C is the outside coating, of asphalt or protective material. The one end of the pipe is left bare of cement on its interior to the depth of one-half of one of the body's corrugations, or thereabout, for the purpose of receiving within such female socket or exposed portion of the body the flush or cemented end of an adjacent pipe-section, fresh cement being introduced into the female socket portion of the first pipe before inserting the other section.

What is here claimed, and desired to be secured by Letters Patent, is—

A pipe composed of an annularly-corrugated metal body, A, a lining, B, of hydraulic cement, and an outer coating, C, of asphalt or other water-proof material, for protecting the metal body against corrosion, substantially as specified.

JAS. S. PIERSON.

Witnesses:

H. M. PIERSON,
S. N. SMITH.