

M. ALLEN.
Asphaltum or Cement Pipe.

No. 206,290.

Patented July 23, 1878.

Fig. 1.

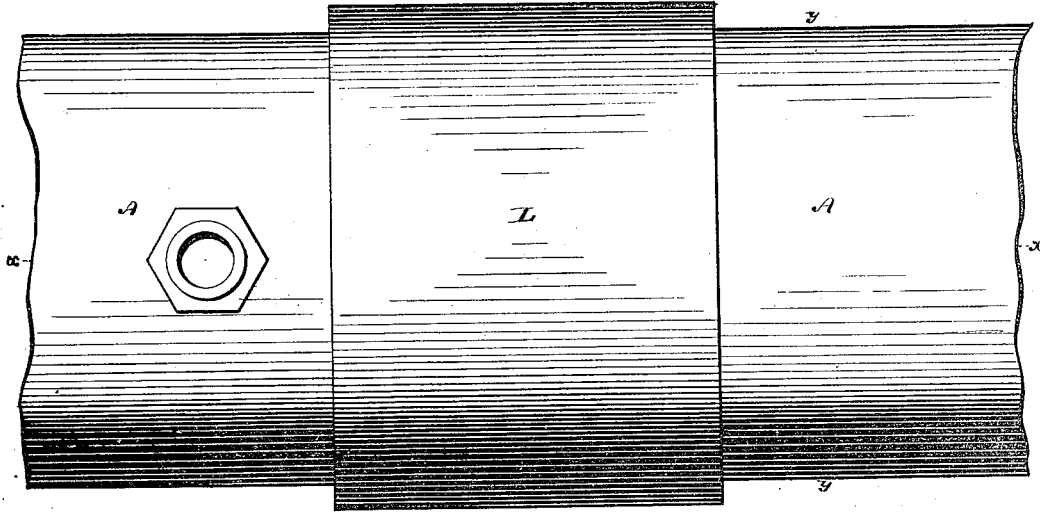
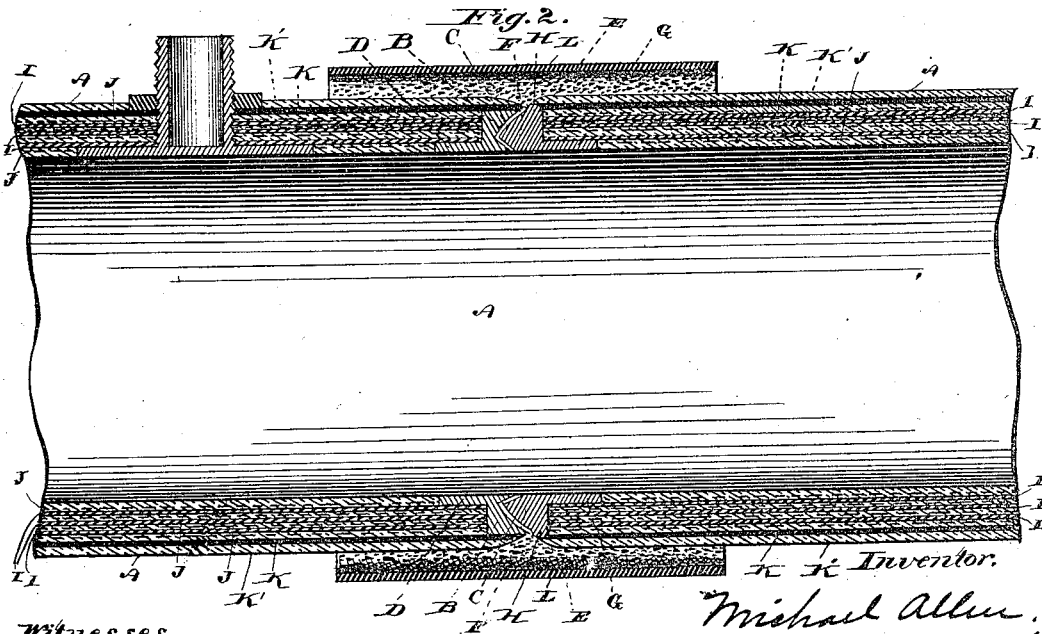


Fig. 2.



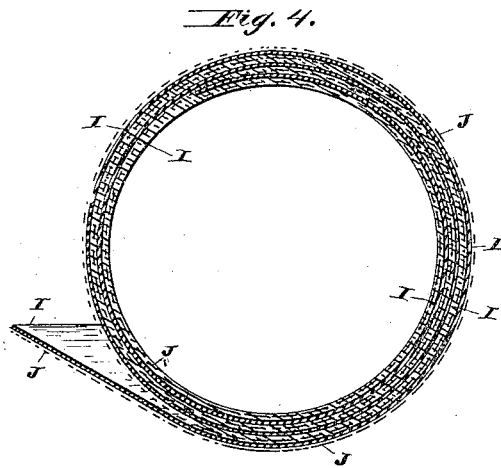
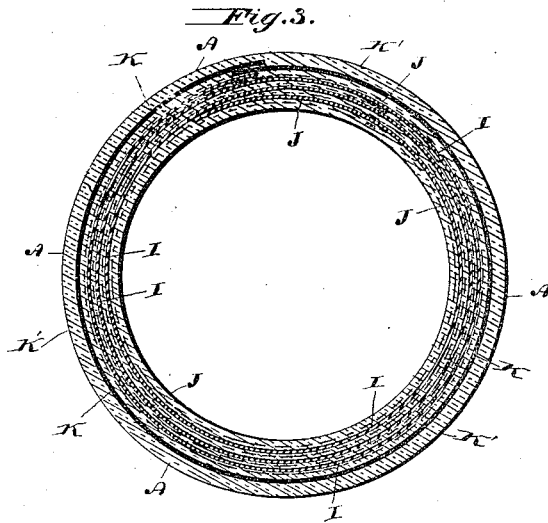
Witnesses.
 Alvin M. Long.
 W. A. Brown

Inventor.
 Michael Allen.
 Per *N. J. Abbot.*
 Atty.

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Michael Allen.

For N. T. Abbott
Atty.

UNITED STATES PATENT OFFICE.

MICHAEL ALLEN, OF NEW YORK, N. Y.

IMPROVEMENT IN ASPHALTUM OR CEMENT PIPES.

Specification forming part of Letters Patent No. 206,290, dated July 23, 1878; application filed June 7, 1878.

To all whom it may concern:

Be it known that I, MICHAEL ALLEN, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Asphaltum or Cement Pipes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side elevation of two sections of pipe joined together, the joint being surrounded by a sleeve. Fig. 2 is a section taken on line *x x* of Fig. 1. Fig. 3 is a transverse section taken on line *y y* of Fig. 1; and Fig. 4 is a view showing the veneer being coiled on the inner cylinder.

This invention relates to certain improvements in pipes for water-mains and other purposes, and is designed as an improvement on Letters Patent No. 203,869, granted to me May 21, 1878; and the invention consists in an asphaltum or cement pipe having embedded therein one continuous veneer of any suitable wood, secured to cloth or other fibrous material, said veneer and cloth being coiled one layer upon the other, and in a cross-section presenting a volute surrounded by a band or coil of sheet metal, which is also embedded in the asphaltum or cement; and the invention further consists in a cast-iron joint formed by two rings having flanges, upon which the veneer is wound; also, in a sleeve surrounding the joint, all of which will be hereinafter more fully set forth.

In the manufacture of this pipe I form a cylinder, A, of asphaltum or cement, and arrange at one end thereof a cast-iron ring, B, formed with a groove, C, and a flange, D, and at the other end I place a cast-iron ring, E, formed with a tongue, F, a flange, G, and a collar, H.

Upon the cylinder A and flanges D and G of the rings B and E are wound one or more coils of veneer, I, of any suitable wood, mounted

upon cloth or other fibrous material J, secured to the veneer by liquid asphaltum or other glutinous substance.

In coiling the veneer the end is first embedded in the cylinder A, and then wound around to the embedded end, and then upon each preceding coil, forming in a cross-section a volute, as shown in Fig. 3 of drawing. As the veneer is being coiled around asphaltum or cement is interposed between each layer.

Upon the coils of veneer is formed a layer of asphaltum or cement, in which is embedded a sheet-metal band, K, which may be coiled around one or more times, the ends extending over and resting on the rings B and E, as shown in Figs. 1 and 2 of drawing. This band or coil K of sheet metal is then covered by a layer of asphaltum or cement, K'. The pipe is then rolled in sand in order to harden the asphaltum and protect it from the heat of the sun.

The joint of each section of pipe is surrounded by a metal sleeve, L, to strengthen the joint, and the space between the pipe and sleeve packed, as shown in Fig. 2 of drawing.

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

1. In an asphaltum or cement pipe, the combination of a coiled veneer and sheet metal, as set forth.

2. In an asphaltum or cement pipe, the combination of a coiled veneer, mounted upon cloth or other fibrous material, and a coil or band of sheet metal, as set forth.

3. An asphaltum or cement pipe having embedded therein coils of veneer, mounted upon cloth, and a band or coil of sheet metal, in combination with the rings B and E and a sleeve, L, as set forth.

In testimony that I claim, the foregoing as my own I affix my signature in presence of two witnesses.

MICHAEL ALLEN.

Witnesses:

WM. SINCLAIR, JR.
WM. M. THOMAS.