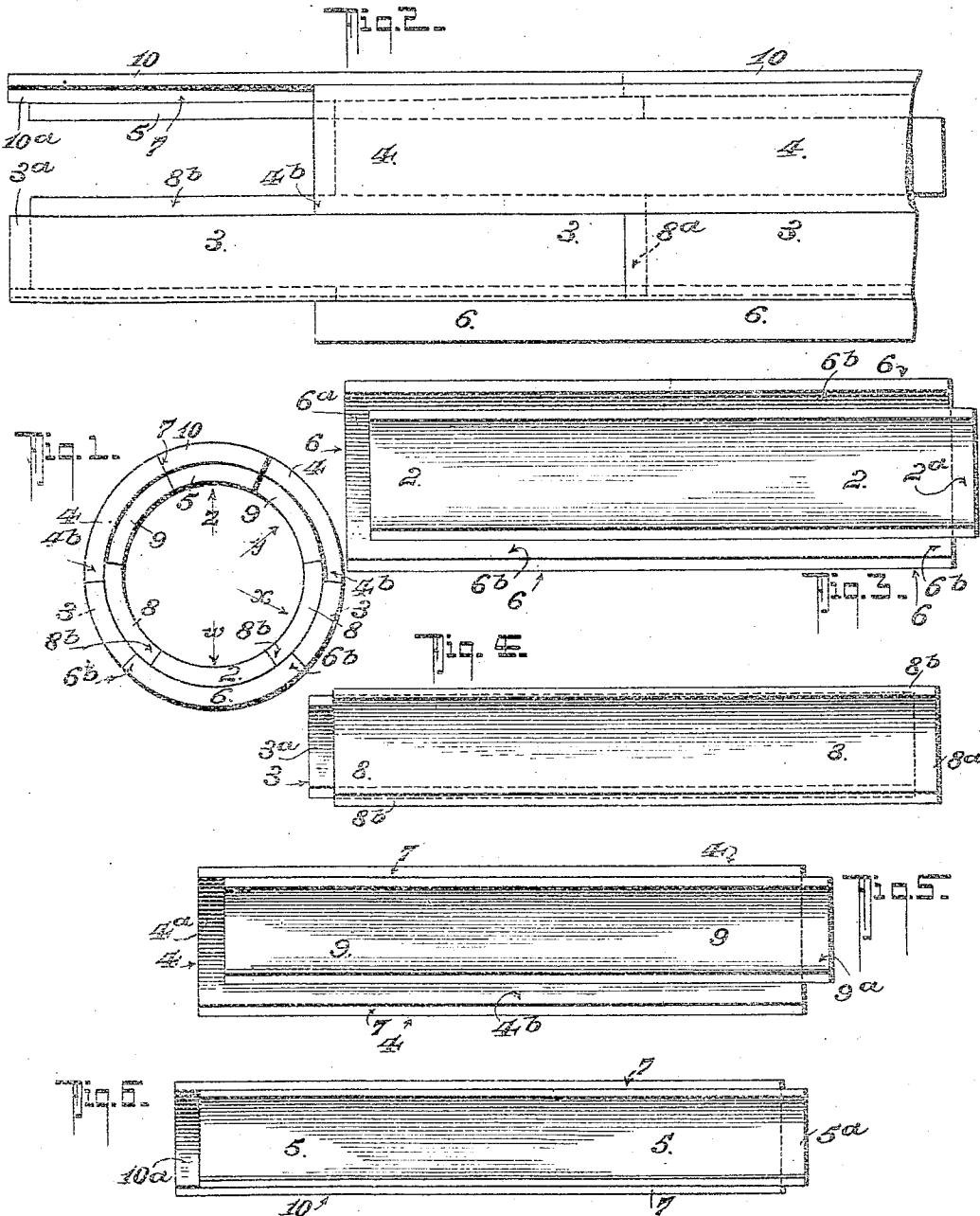


W. LUCAS.
SEWER PIPE CONSTRUCTION.
APPLICATION FILED DEC. 5, 1911.

1,042,579.

Patented Oct. 29, 1912.



WITNESSES:

Howard Woodard

J. F. Schrott

INVENTOR

Walter Lucas

BY

Fred M. Dutton & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

WALTER LUCAS, OF VICTORIA, BRITISH COLUMBIA, CANADA.

SEWER-PIPE CONSTRUCTION.

1,042,579.

Specification of Letters Patent.

Patented Oct. 29, 1912.

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To all whom it may concern:

Be it known that I, WALTER LUCAS, citizen of the Dominion of Canada, residing at Victoria, in the Province of British Columbia, Canada, have invented a new and useful Sewer-Pipe Construction, of which the following is a specification.

This invention relates to a sewer pipe construction wherein the pipe is built up of separate sections, the cross section of each being a segment of the cross section of the pipe and the circumferential and longitudinal joints of the several segments being half checked onto one another that they may afford one another mutual support and prevent direct leakage from the pipe.

The particular manner of forming the sections and of building up the pipe are set forth in the following specification, reference being made to the drawings by which it is accompanied, in which:

Figure 1 is an end view. Fig. 2, a side elevation of a portion of the pipe showing the manner in which the sections are applied, and Figs. 3, 4, 5 and 6 are plan views respectively of the several sections taken in the direction of the arrows *w*, *x*, *y*, and *z*, respectively in Fig. 1.

The pipe is built up of six segments in cross section. These segments are numbered 2—6, 8—3, 9—4, and 5—10. One segment 2—6 and one segment 5—10, being employed while two each of segments 8—3 and 9—4 are employed to make up the cross section of the pipe.

As best indicated in Figs. 3 to 6 inclusive, it will be observed that all of the segments are composed of parts that, preferably, are of the same length and each segment is composed of an inner and an outer shell. The segment 2—6 is composed of the inner shell 2, and the outer shell 6, the shells 2 and 6 being endwise lapped as at 2^a and 6^a, while the shell 6 is of a greater width than the shell 2 to leave side laps 6^b as best shown in Fig. 3 of the drawings. By reference to Fig. 4, it will be observed that segment 3—8 is composed of the inner segment 8 and the outer segment 3, the inner segment being of the greatest width to laterally lap

the outer segment 3, as at 8^b, and the two segments are so arranged with relation to one another as to provide end laps 8^a and 3^a for the shells 8 and 3 respectively. By reference to Fig. 5, it will be observed that the segment 4—9, is composed of the inner shell 9 and the outer shell 4. The shells 9 and 4 each have one side edge held in the same plane to form a radial surface 7, while the shell 4 at the other side overlaps the shell 9, as at 4^b, and the two shells 4 and 9 are endwise overlapped, as at 4^a and 9^a, respectively. The key section or segment 5—10 is composed of an inner shell 5, and an outer shell 10, the two shells being endwise overlapped, as at 5^a and 10^a, while their sides are held in the same planes to form radial surfaces 7 to cooperate with the corresponding sections 7 of the segments 4—9. In assembling the sections they are assembled as indicated in Figs. 1 and 2 so that the joints will overlap endwise and sidewise with the exception that the key segment 5—10 does not sidewise overlap the adjacent segments 4—9.

The advantages of this method of building up a pipe are that the molds being smaller and more accessible, the material may be more carefully mixed, and the surfaces better finished, that the sections of even a large pipe are more portable and can be better set in the trench, and in dispensing with the enlarged faucet of the customary circumferential joint, a considerable saving in material is effected.

What I claim is:—

1. A sewer pipe composed of sections each section forming a segment of the cross section of the pipe and the edges of transverse and longitudinal joints being lapped one with the other, the lap of the bottom segment projecting on each side outside that of the adjacent side segment, the lap of the upper side segment projecting outside that of the lower side segment and the top or keying segment having plain radial faces.

2. A sewer pipe composed of sections each consisting of an inner and an outer shell, the shells of each section excepting the key section being longitudinally overlapped, the shells of a section being each of the same

length, some of said sections having their shells laterally overlapped, all being arranged that when said sections are assembled in pipe form the adjacent sections will be laterally and, excepting the key section, longitudinally overlapped at their joints, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WALTER LUCAS.

Witnesses:

ROWLAND BRITTAIN,
WM. S. SOUTAR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."