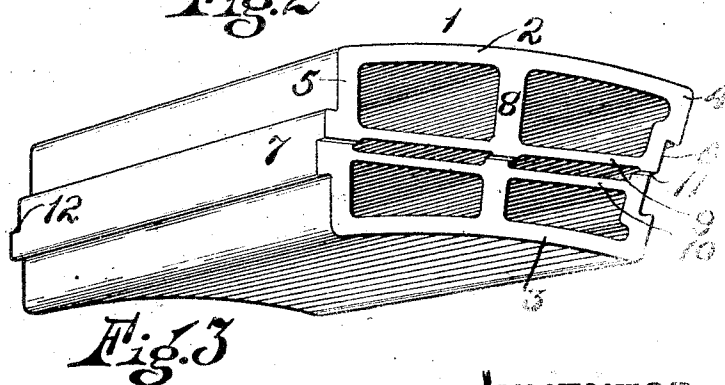
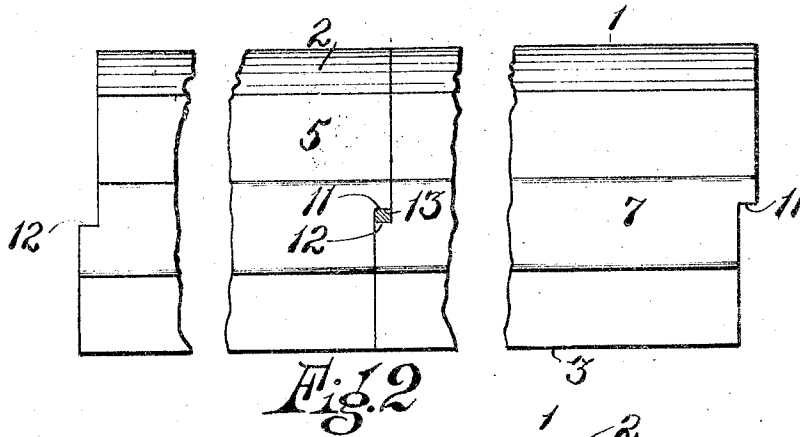
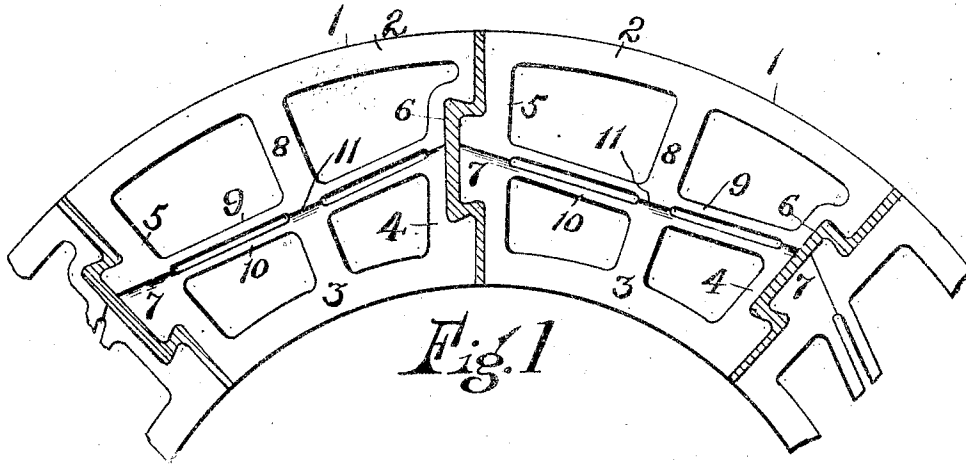


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SEWER PIPE SECTION FOR SEWER BUILDING.
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1,037,328.

Patented Sept. 3, 1912.



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WILLIAM H. ROOK, JR., OF AKRON, OHIO.

SEWER-PIPE SECTION FOR SEWER-BUILDING.

1,037,328.

Specification of Letters Patent.

Patented Sept. 3, 1912.

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To all whom it may concern:

Be it known that I, WILLIAM H. ROOK, Jr., a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented new and useful Improvements in Sewer-Pipe Sections for Sewer-Building, of which the following is a specification.

This invention relates to improvements in the construction of segmental sections of vitrified sewer-pipe for use in building large conduits such as sewers, etc., and the object is to provide a section which when properly assembled with other similar sections may be used for forming a sewer or other tubular conduit. It is contemplated that these sections will be laid up in annular formation to form the wall of a sewer of greater diameter than can be constructed of the ordinary cylindrical sections of sewer-pipe.

A principal object of this invention is to so construct the various segmental sections that each will be provided with superior interlocking means whereby they are securely held in position when laid, said means embodying the formation at the ends of each section of transverse shoulders to cooperate with the shoulders of abutting sections to constitute a space for the mortar by which the sections are joined together, the shoulders affording a backing or abutment for the cementing vehicle used.

With the foregoing and other objects in view, the invention consists in the novel construction, combination and arrangement of parts constituting the invention to be hereinafter specifically described and illustrated in the accompanying drawings which form a part hereof wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawings, in which similar reference numerals indicate like parts in the different figures: Figure 1 is an end elevation partly in section of a portion of a sewer or tubular conduit constructed of sections embodying this invention. Fig 2 is a view in side elevation of two sections arranged in abutting relation; and, Fig. 3 is a perspective view of a sewer-pipe-section embodying this invention.

Before going into a detailed description of this invention it will be stated that these

sections are preferably formed of vitrified sewer-pipe and arranged when properly assembled to form the wall of a tubular sewer or conduit and as all of the sections are constructed precisely alike, it is thought that a description of one, together with the description of the manner of assembling a plurality of such sections, will be sufficient.

It will be apparent in laying up the various sections in constructing a tubular conduit or sewer, it will be after the manner in which brick are commonly laid; that is to say, the joints between various series of sections will break joints.

In the drawings, the reference numeral 1 denotes a section preferably constructed of vitrified sewer-pipe and made in accordance with this invention; and it embodies an outer wall 2, an inner wall 3 and lateral walls 4 and 5. The outer wall 1 and inner wall 3 are concentric with the center of the sewer or conduit in which they are to be employed and are preferably made integral with the lateral walls 4 and 5. The lateral wall 4 is provided with a longitudinally-extending dove-tailed groove 6 and the wall 5 with a corresponding longitudinally-extending rib 7. The groove 6 is preferably made slightly larger than the rib 7, so that when two similarly-constructed sections are laid in lateral lapping engagement, the rib 7 of one section will be freely received in the groove 6 of the complementary section and leave sufficient space for the insertion of a binding element, such as mortar. The outer faces of the lateral walls 4 and 5 are preferably radial with respect to the center of the sewer or conduit in which they are used. Each section is further provided with an approximately central radial web 8 extending from the inner face of the outer wall 2 to the outer face of the inner wall 3. Each section is also provided with two webs 9 and 10 arranged parallel and in spaced relation and extending between the lateral walls 4 and 5, the space between the webs 9 and 10 being interrupted by the central radial web 8, all of which webs extend from end to end of each section.

At one end of each section the inner half of the section is cut away to provide a shoulder 11, so that the outer portion overhangs the lower portion, and this shoulder is customarily provided along the line of the inner face of the web 9, and the opposite end of each section is cut away at its outer por-

tion to provide a shoulder 12, said shoulder being usually located at a point approximately along the outer face of the inner web 10, so that when complementary sections are abutted end to end there will exist a space 5 between the shoulders 11 and 12 for the reception of mortar or some equivalent binding material, this occurring at all times when the outer surfaces of abutting sections are in alinement, as shown in Fig. 2, the space 10 between the shoulders 11 and 12 for the reception of the mortar being designated in the drawings by the reference numeral 13, the inner face of the web 9 constituting the shoulder 11 and the outer face of the web 10 15 constituting the shoulder 12 forming suitable abutments or backings against which a binding element such as mortar may engage for locking the abutting ends of the sections together when being set up.

In assembling segments constructed in accordance with the foregoing description for the building of a tubular conduit or sewer, the lateral walls 4 and 5 are preferably covered 25 with mortar or equivalent material for uniting them in annular formation, permitting the longitudinal rib 7 to enter the complementary groove 6 of adjacent sections and be interlocked therewith through the medium of said mortar, the mortar being 30 designated in the drawings by the reference numeral 14.

In manufacturing these sections they are preferably formed in a press and afterward 35 the cutting away of portions at the ends of the sections is performed by hand, although the method of manufacturing these sections is immaterial to this invention, as long as said sections embody means on the lateral

walls thereof for causing the locking of adjacent sections and the provision at the ends of said sections of overlapping portions to provide spaces for the reception of a binding element, with the abutting ends provided with transversely-extending shoulders constituting an abutment or backing for said binding element. 40 45

I claim:

1. A hollow tile having its inner wall cut-away at one end and its outer wall cut-away 50 at the other end to form shoulders reversely arranged at opposite ends, the shoulders when two tiles abut overlapping and out of contact to form a transverse mortar groove, a longitudinal wall terminating near the 55 transverse groove at each end whereby a communicating chamber opening into the mortar groove is formed to provide a mortar clench.

2. A hollow tile having its inner wall cut-away at one end and its outer wall cut-away 60 at the other end to form shoulders reversely arranged at opposite ends, the shoulders when two tiles abut overlapping and out of contact to form a transverse mortar groove, spaced longitudinally-extending walls terminating near the transverse groove at each 65 end to provide an opening communicating with said grooves to constitute a space for a mortar clench. 70

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM H. ROOK, Jr.

Witnesses:

A. E. KLING,

C. E. HUMPHREY.