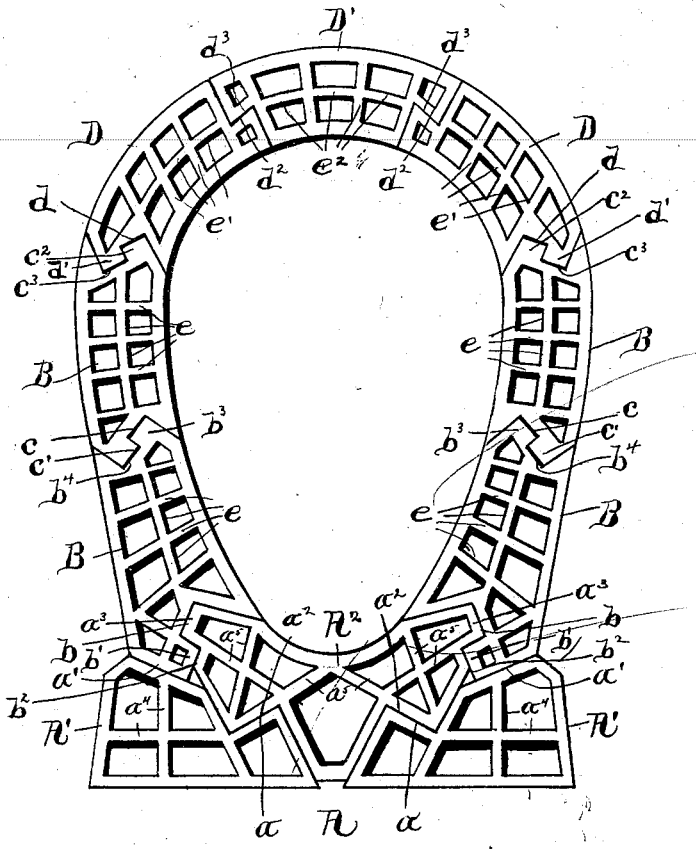
No. 650,169. Patented May 22, 1900.

M. C. CONWAY.

SEWER.

(Application filed Feb. 15, 1900.)

(No Model.)



WITNESSES:

J. J. Laass.

H. B. Smith.

INVENTOR

Merritt C. Conway

By Ed. Laass

ATTORNEY

UNITED STATES PATENT OFFICE.

MERRITT C. CONWAY, OF SYRACUSE, NEW YORK.

SEWER.

SPECIFICATION forming part of Letters Patent No. 650,169, dated May 22, 1900.

Application filed February 15, 1900. Serial No. 5,239. (No model.)

To all whom it may concern:

Be it known that I, MERRITT C. CONWAY, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Sewers, of which the following, taken in connection with the accompanying drawing, is a full, clear, and exact description.

This invention relates to the construction of sewers, and particularly to that class in which sections or tiles are employed, which sections are provided with means for interlocking the same.

The main object of the invention is to produce a sewer which shall be strong, rigid, and durable, can be quickly constructed, and at the same time shall be inexpensive.

To that end the invention consists, essentially, of a sewer comprising a base composed of two side sections and a central section interlocked with said side sections and extending above the same, the walls comprising interlocking sections, the lowermost wall-section resting partly upon the central section and partly upon the side sections and interlocked therewith, crown-sections interlocked with the uppermost wall-sections, and a key-section interlocked with said crown-sections.

Furthermore, the invention consists in the novel detail construction and arrangement of the component parts of my improved sewer, as hereinafter fully described, and set forth in the claims.

The accompanying drawing represents an end view of a sewer of my improved construction.

Referring to the drawing, A denotes the base of the sewer, which is composed of the two side sections A′ A′ and the central section A^2. The side sections are provided with flat bottoms and have their inner sides converging downwardly and each formed with a longitudinal outwardly-inclined shoulder a, and the tops of said sections slope inwardly, as shown at a'. The central section A^2 has its sides converging likewise and formed with corresponding shoulders a^2 a^2, which are interlocked with the shoulders a a. Said central section extends above the side sections A′ A′ and is formed with upwardly-diverging longitudinal tongues a^3 a^3, which project over the tops of said side sections. The bottom of the central section is preferably slightly above the bottoms of the side sections, and the top of the said section is depressed or concave and forms the bottom of the interior or passage. The side base-sections A′ A′ are formed with the usual webs a^4 a^4, and the central section is formed with webs a^5 a^5, which serve to strengthen the same.

B B represent the wall-sections, the lowermost of which are formed at their lower sides with longitudinal inwardly-sloping grooves b b, which receive the aforesaid tongues a^3 a^3 on the central section, and also formed with likewise-sloping longitudinal tongues b' b', which engage corresponding grooves b^2 b^2 between the tongues a^3 a^3 and tops of the side sections, whereby said wall-sections rest partly upon the said central section and partly upon the side sections and are interlocked therewith. The upper sides of the lowermost wall-sections B B are formed with inwardly-sloping longitudinal tongues b^3 b^3 and grooves b^4 b^4, which are interlocked with corresponding grooves c c and tongues c' c', formed at the lower sides of the upper wall-sections B B. The upper sides of the uppermost wall-sections are formed with like tongues c^2 c^2 and grooves c^3 c^3, which are interlocked with corresponding grooves d d and tongues d' d', formed at the lower sides of the crown-sections D D, and the upper sides of said crown-sections are formed with longitudinal acute-angled shoulders d^2 d^2, which are interlocked with like shoulders d^3 d^3, formed on the sides of the key-section D′.

It will then be seen that by forming the interlocking tongues and grooves in the manner described the sections are caused to be drawn inwardly, and thus become wedged together, thereby producing a very strong and rigid construction.

The wall-sections B B, the crown-sections D D, and key-section D′ are formed with strengthening-webs e e' e^2, respectively.

It is to be understood that the various joints throughout the construction are to be left with sufficient space to admit of cement in the usual manner. Furthermore, it will be seen that the principle employed for interlocking

the wall-sections may be applied in various structures, and therefore I do not wish to be limited to a sewer construction.

I do not wish to be limited to the specific construction shown and described, and the same may be modified to some extent without departing from the spirit of my invention.

What I claim is—

1. A sewer comprising a base composed of two side sections and a central section extending above said side sections, and the walls supported partly on the central section and partly on the side sections substantially as described.

2. A sewer comprising a base composed of two side sections and a central section extending above said side sections and interlocking therewith, and the walls interlocked with both the central and the side sections substantially as described.

3. A sewer comprising a base composed of two side sections having their inner sides converging downwardly, and a central section having corresponding sides and extending above said side sections, the top of the side sections sloping inwardly, and the walls supported partly on the central section and partly on the side sections substantially as described.

4. A sewer comprising a base composed of two side sections having their inner sides converging downwardly and each formed with a longitudinal shoulder and a central section having its sides converging likewise and formed with corresponding interlocking shoulders, said section extending above the side sections and formed with longitudinal tongues, and wall-sections supported partly upon the central section and partly upon the side sections and formed with longitudinal grooves by which they are interlocked with the aforesaid tongues substantially as described.

5. A sewer comprising a base composed of two side sections having their inner sides converging downwardly and their tops sloping inwardly, and a central section having its sides converging likewise and extending above said side sections and the side portions of its top likewise inclined, and wall-sections interlocked with said base-section substantially as described.

6. A sewer comprising a base composed of two side sections and a central section extending above the side sections and interlocked with the same and formed with longitudinal tongues projecting over said side sections, and wall-sections supported partly upon the central section and partly upon the side sections and formed with longitudinal grooves by which they are interlocked with the aforesaid tongues substantially as described.

7. A sewer comprising a base composed of two side sections and a central section extending above the side sections and interlocked with the same, and formed with longitudinal tongues projecting over said side sections, and forming longitudinal grooves between said tongues and tops of the said side sections and wall-sections supported partly upon the central section and partly upon the side sections and formed with correspondingly-interlocking tongues and grooves substantially as described.

8. In the herein-described sewer, the base comprising two side sections having their inner sides converging downwardly and formed with longitudinal shoulders, and a central section having its sides converging likewise and formed with corresponding interlocking shoulders substantially as set forth.

9. In the herein-described sewer, the base comprising two side sections formed on their inner sides with outwardly-sloping longitudinal shoulders, and a central section formed on its sides with corresponding shoulders interlocking with the aforesaid shoulder substantially as set forth.

10. A sewer comprising a base composed of two side sections having their inner sides converging downwardly and formed with longitudinal outwardly-sloping shoulders and having their tops sloping inwardly, and a central section having its sides converging likewise and formed with corresponding interlocking shoulders, said latter section extending above the side sections and also formed with longitudinal tongues projecting over said side sections and forming grooves between said tongues and tops of the side sections, and the wall-sections supported partly upon the central section and partly upon the side sections and formed with longitudinal tongues and grooves interlocked with the aforesaid grooves and tongues substantially as described.

11. A sewer comprising a base composed of two side sections having their inner sides converging downwardly and formed with longitudinal shoulders, and a central section having its sides converging likewise and formed with corresponding shoulders interlocked with the aforesaid shoulders and extending above the side sections and also formed with longitudinal tongues projecting over the tops of the side sections, forming grooves between said tongues and tops of the side sections, the lowermost wall-sections formed at their lower sides with longitudinal grooves and tongues interlocked with the aforesaid tongues and grooves, and formed at the upper sides with similar tongues and grooves, the succeeding upper wall-sections formed at their lower and upper sides with corresponding grooves and tongues and interlocked with the subjacent sections, the crown-sections formed at their lower sides with longitudinal tongues and grooves interlocked with the grooves and tongues at the upper sides of the uppermost wall-sections and formed with longitudinal shoulders on their upper sides, and the key-section formed

with corresponding shoulders interlocked with the shoulders of said crown-sections substantially as described.

12. In the herein-described sewer, the base comprising two side sections having their inner sides converging downwardly and a central section having its sides converging likewise and interlocked with said side sections, the walls composed of interlocking sections and interlocked with base, the crown-section interlocked with the uppermost wall-section, and the key-section interlocked with said crown-section substantially as described.

MERRITT C. CONWAY.

Witnesses:
J. J. LAASS,
H. B. SMITH.