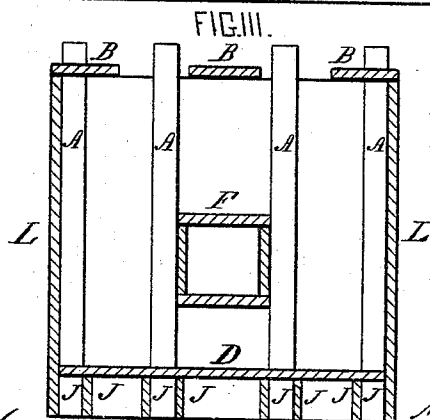
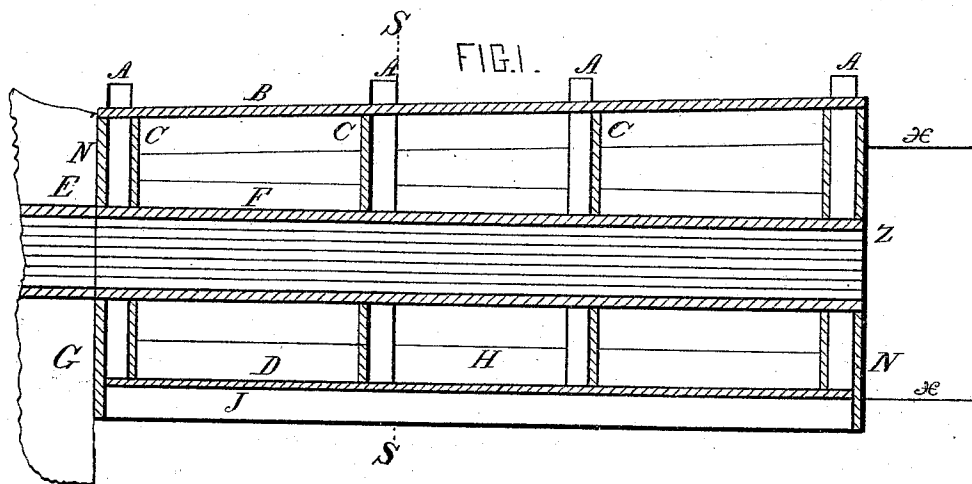


M. CLEXTON & A. KING.
Combined Piers and Sewers.

No. 150,937.

Patented May 19, 1874.



Witnesses:

J. W. Elliott,
F. W. Parker

Inventors:

Matthew Clepton,
Addison King,
By G. L. Chapin,
att'y

UNITED STATES PATENT OFFICE.

MATTHEW CLEXTON AND ADDISON KING, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN COMBINED PIERS AND SEWERS.

Specification forming part of Letters Patent No. **150,937**, dated May 19, 1874; application filed December 18, 1873.

To all whom it may concern:

Be it known that we, MATTHEW CLEXTON and ADDISON KING, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Combined Pier and Sewer, of which the following is a specification:

The nature of the present invention consists in the novel construction and combination of a pier and sewer, whereby the pier serves the double purpose of a break-water and a support for the sewer leading out from the shore into the body of water, as hereinafter described and shown.

In the drawings, Figure 1 is a longitudinal vertical section of one section of our improvement in piers and sewer-pipe; Fig. 2, a bottom view thereof; Fig. 3, a transverse section of Fig. 1 on line I.

A A, &c., represent the upright posts, which support the longitudinal and transverse posts of the pier and sewer, and which are, in practice, about six by six inches square, and of such length as will reach the bed of the water and extend three or five feet above it. The ends and sides of the pier are covered with three-inch plank N N L L, spiked solid to the posts A; and to the bottom ends of the posts, longitudinally, are fastened narrow three-inch plank J J, Figs. 1, 2, 3, to the tops of which is fastened a countersunk bottom, D, of such height above the planking L N as to form downward projections J J, to bed in the sand or earth, to prevent the pier from moving laterally. Transverse partitions C C are

fastened to the central posts A, to strengthen the pier, form a support for the sewer F, and to divide the sand or stone which sinks the pier. The sewer-pipe F is made of three-inch plank, fastened together at their angles and to the inner posts A, and it is supported by the transverse partitions C C and end planking N. The water end Z of the pier is made as much wider than the shore end as will bring the top of the pier level when sunk, the sewer F having suitable fall. When a long pier is required it can be made in sections, corresponding in taper and height to the depth of water, so that the compound pier, when done, shall be level on top. G represents the shore, and E the shore end of the pier. The pier so made with sewer is floated to the place where it is to be set, and is then sunk by filling the compartments with earth, sand, or stone.

These piers have been used, and found to serve a better purpose, as a shore-protector and drain, than any other heretofore used.

We claim—

A combined pier consisting of compartments, in one section or more, constructed as described, and combined with a sewer-pipe, F, supported by partitions C C and posts A, as and for the purpose set forth.

MATTHEW CLEXTON.
ADDISON KING.

Witnesses:

J. H. ELLIOTT,
G. L. CHAPIN.