

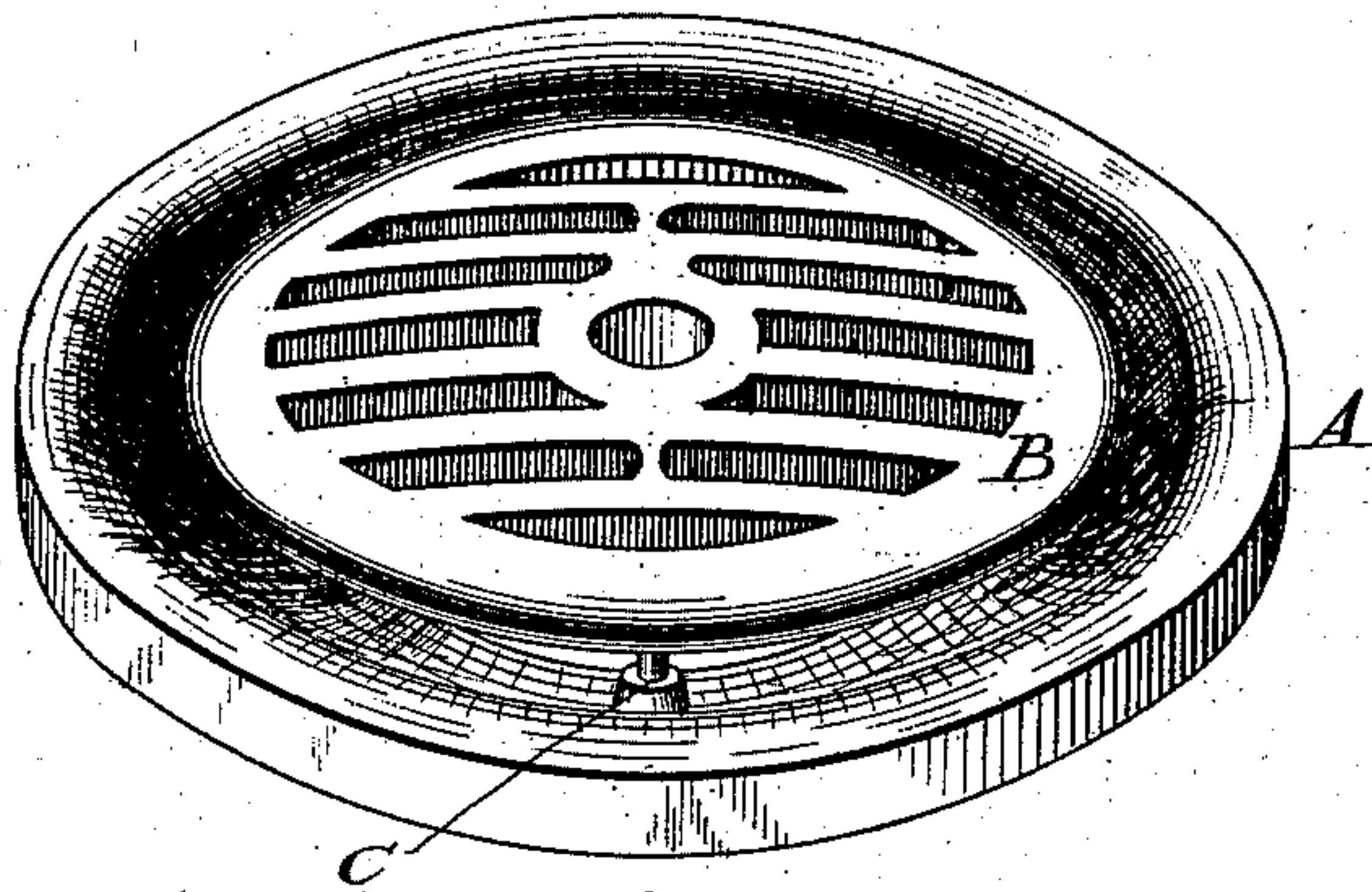
(No Model.)

A. H. LOWELL.  
Sewer-Grating.

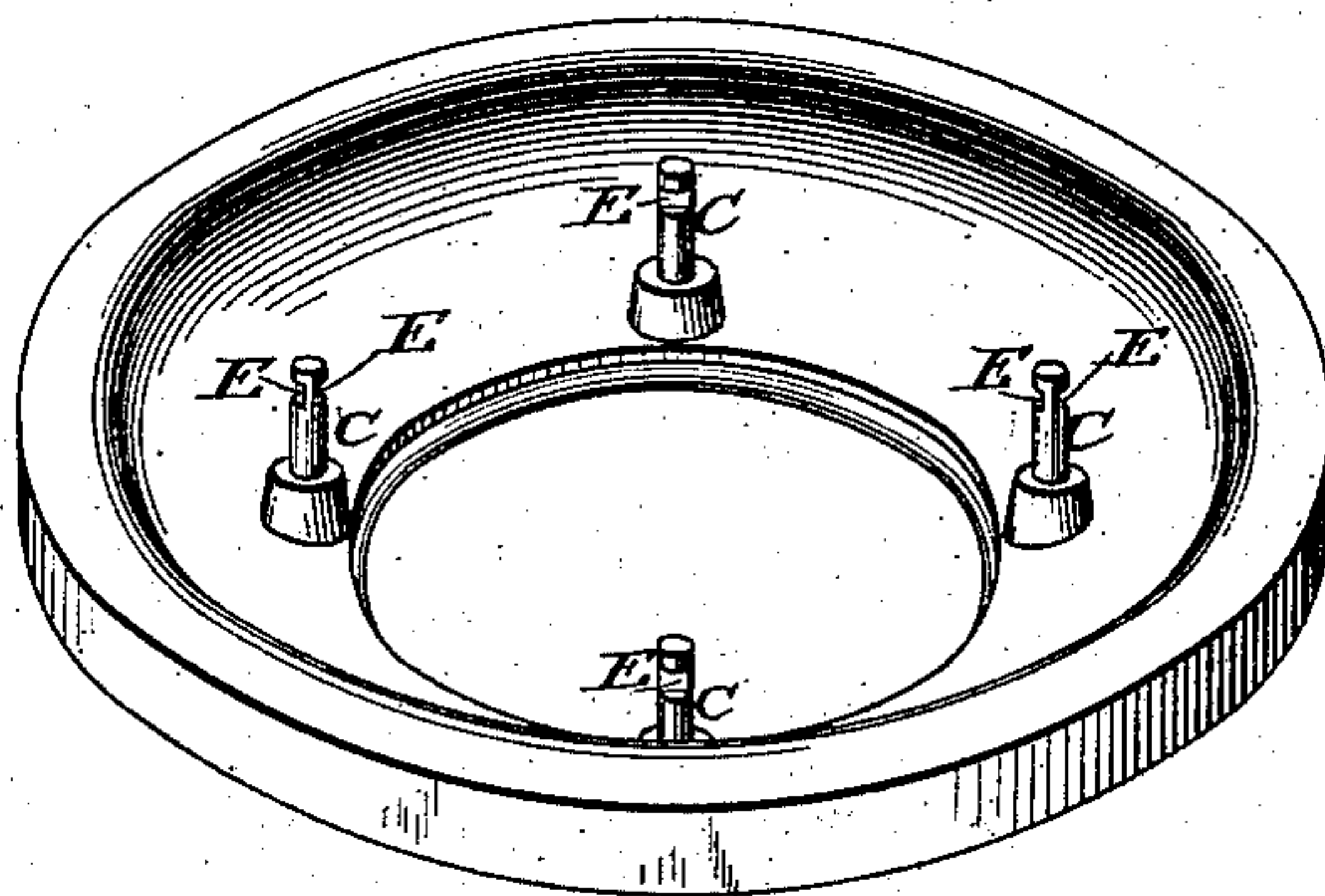
No. 228,091.

Patented May 25, 1880.

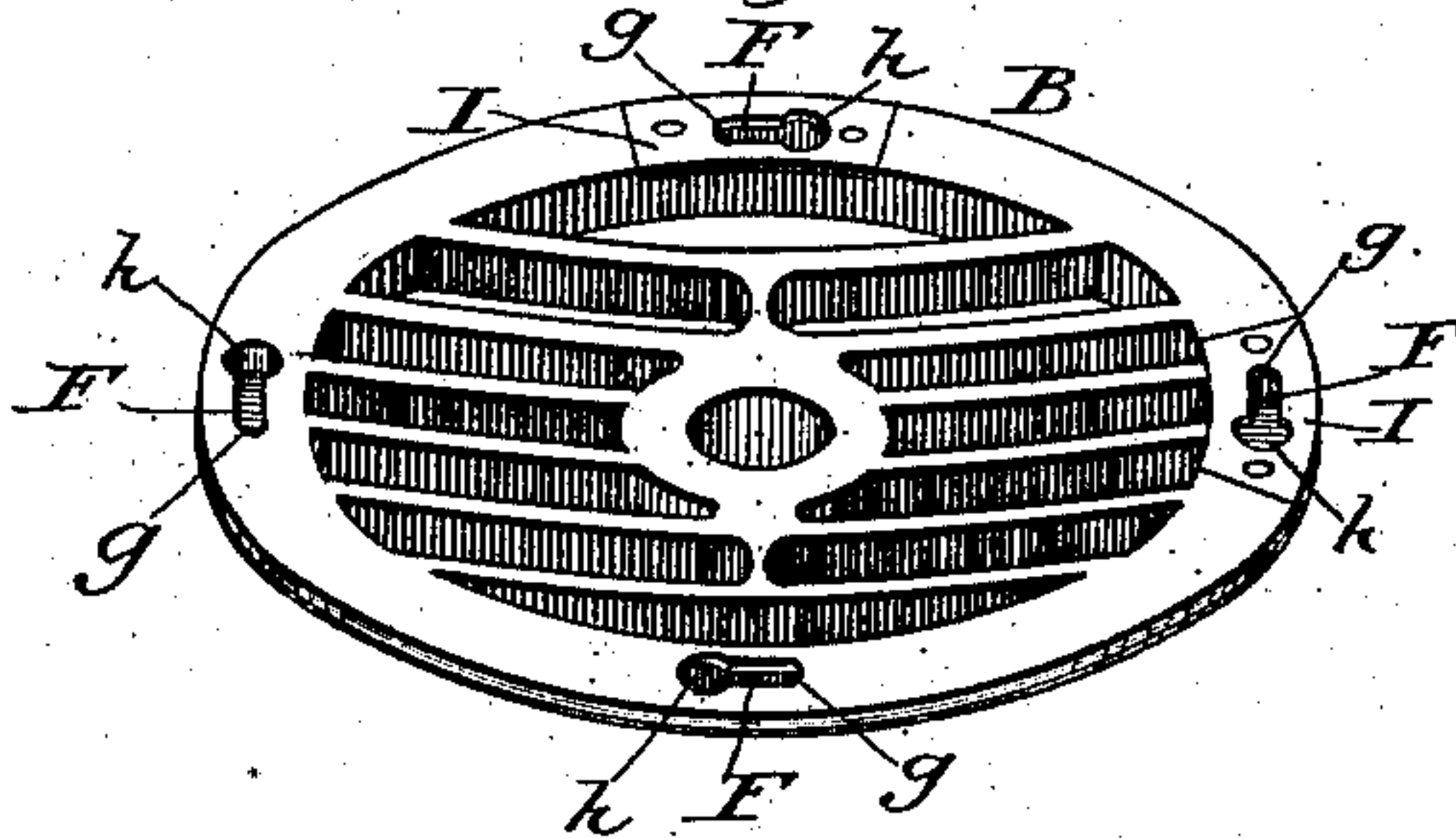
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Attest.*

*Sidney P. Hollingsworth*

*J. A. Rutherford*

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*Albion H. Lowell,*

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*Atty.*



# UNITED STATES PATENT OFFICE.

ALBIEN H. LOWELL, OF MANCHESTER, NEW HAMPSHIRE.

## SEWER-GRATING.

SPECIFICATION forming part of Letters Patent No. 228,091, dated May 25, 1880.

Application filed March 16, 1880. (No model.)

*To all whom it may concern :*

Be it known that I, ALBIEN H. LOWELL, of Manchester, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Sewer-Grating, of which the following is a specification.

This invention relates to certain improvements in that class of sewer-traps which are provided with an elevated grating above the opening, so that it will not become obstructed by small sticks, straws, leaves, and other small rubbish not large enough to clog the sewer or drain with which it may be connected, and at the same time will prevent all matter from passing which is large enough to do injury to said drain.

In such traps as heretofore constructed the grating has been supported upon pins which are permanently fastened to both the trap-shell and grating, or the trap-shell has been provided with an annular shoulder, in which an annular support for the grating has been affixed by means of a bayonet or other joint.

Both of these forms have been found objectionable in practice, for the reason that in the first-mentioned it is impossible to remove the grating without destroying its supports, while in the last-mentioned, owing to the fastening devices being located in the shell of the trap, directly in the way of the passing water, the grating is liable to be frozen to the shell in winter, rendering it almost impossible to remove said grating, and impracticable to get at the sewer, for cleaning in the case of any stoppage therein.

The object of my invention is to obviate these objections; and to this end it consists in attaching the grating-supports permanently to the trap-shell, and so constructing the grate that it may be removably secured to the upper ends of said supports by means of suitable locking devices, as more fully hereinafter specified.

In the drawings, Figure 1 represents a perspective view of my invention; Fig. 2, a perspective view of the annulus, and Fig. 3 a view of the grate detached and inverted.

The letter A indicates the shell or rim of the trap, consisting of a cast-metal concavo-convex annulus with the concave side uppermost. This

shell, however, may be made square, octagonal, or of any other suitable shape. The letter B represents the grate thereof secured upon the upright supports C, which are firmly secured to or formed upon the upper concave surface of said annulus. The upper ends of said supports are provided on opposite sides with recesses E, giving the tops of the supports heads or buttons which engage in recesses or button-holes F, formed at suitable points in the under side of the grate B. The recesses F on said grate are formed with a narrow opening, *g*, terminating at one end in an eye, *h*, through which the end of the support enters when the grate is placed in position, the sides of the narrow opening serving, when the grate is slightly rotated, to engage the recesses on the ends of the supports, and thus secure the grate in place.

The recesses or button-holes for engaging the heads of the grate-supports may be cut directly in the solid rim of the grate, or may be formed by attaching to the under surface of said rim separate plates I, having suitable apertures cut therein, as shown in Fig. 3, said plates bridging cut-away portions of recesses in the rim.

It will be perceived that as thus constructed the locking devices for securing the grate are elevated above the water-passage, and cannot therefore become clogged and fastened by the ice in winter, thus permitting the grate to be readily removed for access to the sewer at all times.

It will be obvious that almost any ordinary sewer-trap may be easily adapted to receive my improved grate, it being only necessary to provide a trap-rim with suitable posts or supports having their tops formed to engage with the recesses, button-holes, or other engaging devices with which the under surface of the grate is formed or provided.

What I claim is—

1. In combination with the shell of a sewer-trap, the grate provided with recesses adapted to fit and interlock upon the upper ends of upright supports on the shell, substantially as and for the purposes specified.

2. A sewer-grate formed or provided with devices on its under surface for engaging with posts or supports arranged upon a trap shell

or rim, substantially as described, whereby said grate may be removed or replaced at will.

3. The combination, with the concave annular shell A, provided with the upright supports C, having recesses E near their tops, of the grating B, having the under side of its rims provided with the metal button-holes for engaging with tops of said supports, substantially as described.

In testimony that I claim the foregoing I do have hereunto set my hand in the presence of the subscribing witnesses.

ALBIEN H. LOWELL.

Witnesses:

JAMES L. FOOTE,  
THOMAS FOOTE.