

H. H. CHURCH.  
Screen or Grid for Gas-Purifier.

No. 205,727.

Patented July 9, 1878.

Fig. 1.

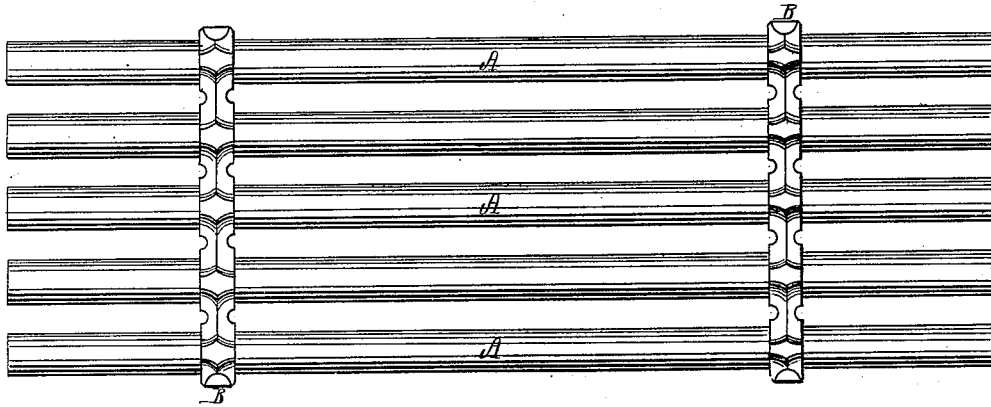


Fig. 2.

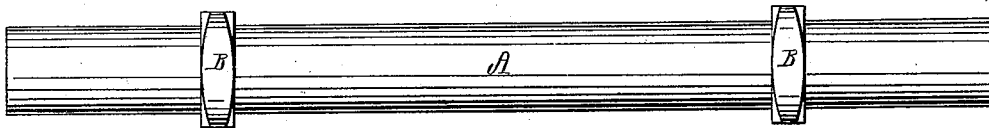
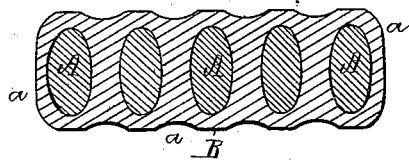


Fig. 3.



Witnesses.

S. N. Piper.

L. W. Miller.

Inventor

Hannibal Hamlin Church.

by his attorney

R. H. Eddy

# UNITED STATES PATENT OFFICE.

HANNIBAL H. CHURCH, OF LAWRENCE, MASSACHUSETTS, ASSIGNOR TO  
LAWRENCE GAS COMPANY, OF SAME PLACE.

## IMPROVEMENT IN SCREENS OR GRIDS FOR GAS-PURIFIERS.

Specification forming part of Letters Patent No. 205,727, dated July 9, 1878; application filed  
April 4, 1878.

*To all whom it may concern:*

Be it known that I, HANNIBAL HAMLIN CHURCH, of Lawrence, of the county of Essex and State of Massachusetts, have invented a new and useful Screen or Grid for use in Gas-Purifiers; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 an edge elevation, and Fig. 3 a transverse section, of it.

It is composed of a series of wooden bars, A, and two metallic holders, B, formed and arranged as represented. Each bar is elliptical, or thereabout, in its transverse section. They are arranged parallel to each other at equal distances apart, and driven through the holders B B, each of which is a metallic or cast-metal bar, provided with a series of holes, *a*, for reception of and to fit closely to the bars A.

Should either wooden bar become injured it becomes an easy matter to remove it and supply its place with another, and when the bars may become worn on their upper edges the grid may be turned over or reversed, so as to bring the lower edges of the bars uppermost. These grids are to be used in gas-purifiers, and are to support the lime through which the gas is to pass for being purified.

In this grid the holders B B are not arranged at the extreme ends of the bars A A, but each of such holders is placed about midway between the middle and the next adjacent ends of the bars. Furthermore, each holder of itself is a solid bar of metal, having a series of elliptical holes through it to receive the bars A A. This saves the necessity of having each holder composed of two bars and clamp screws and nuts, as shown in the United States Patent No. 72,455, and consequently greatly cheapens the construction of the holder.

By having the holders arranged with the bars, as shown, side connection-bars, constituting with the holders a rectangular frame, as shown in patent 161,296, are dispensed with. Dovetails in the bars and spacing-blocks are also dispensed with, thus cheapening and simplifying the grid greatly in its construction.

I claim—

As a new manufacture, the described gas-purifier grid composed of the series of wooden bars A and the metallic perforated holders B B, arranged and combined as set forth.

HANNIBAL HAMLIN CHURCH.

Witnesses:

GEO. D. CABOT,  
E. E. BRANCH.