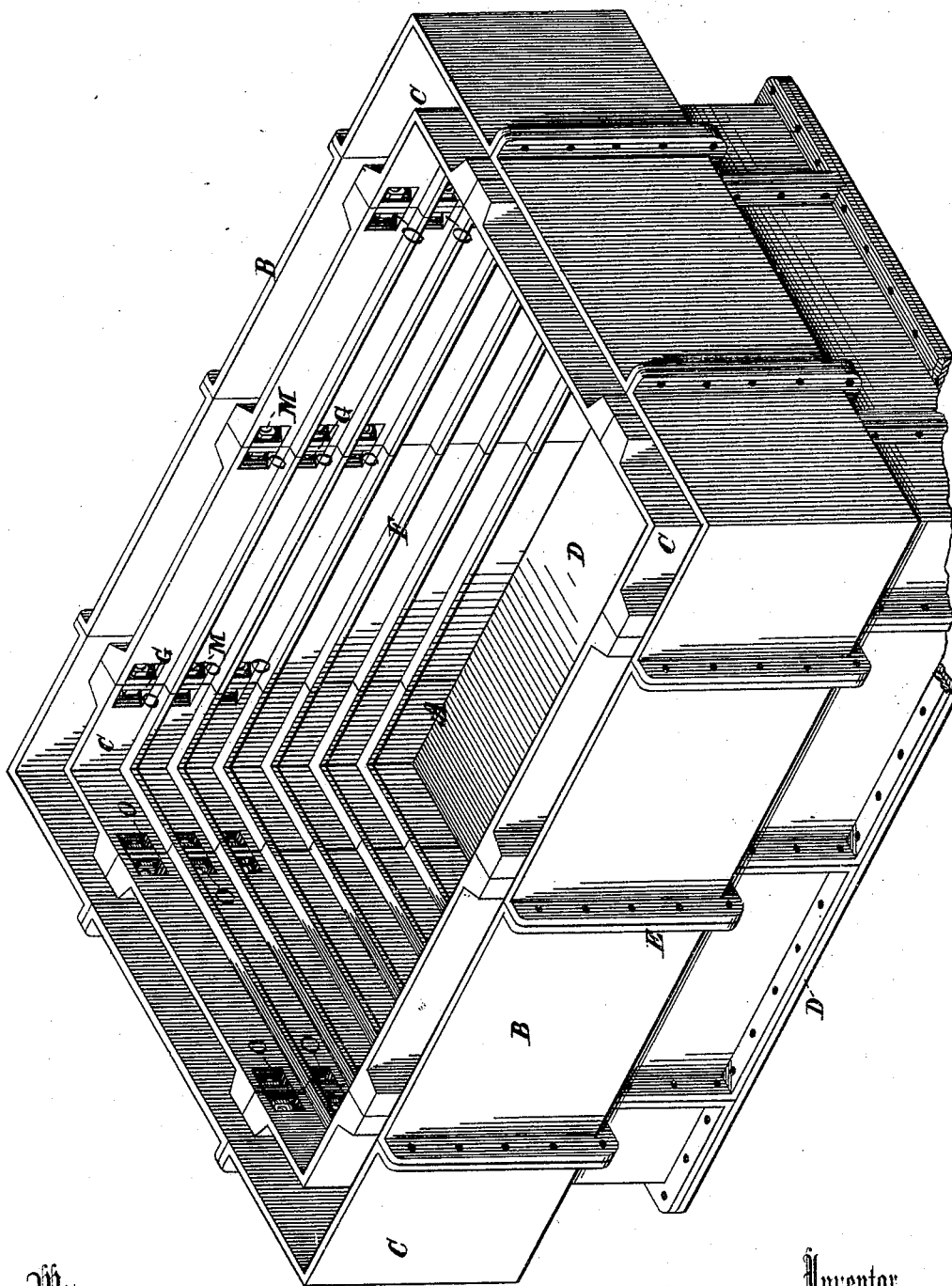


P. MUNZINGER.  
GAS-PURIFIER.

No. 181,276.

Patented Aug. 22, 1876.



Witnesses

W. A. Wright  
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By

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# UNITED STATES PATENT OFFICE.

PETER MUNZINGER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
MORRIS, TASKER & CO., (LIMITED,) OF SAME PLACE.

## IMPROVEMENT IN GAS-PURIFIERS.

Specification forming part of Letters Patent No. **181,276**, dated August 22, 1876; application filed  
June 26, 1876.

*To all whom it may concern:*

Be it known that I, PETER MUNZINGER, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Gas-Purifiers, of which I hereby declare the following to be a full, clear, and precise description, reference being had to the accompanying drawing, which forms part of this specification, and is a perspective view of a gas-purifier embodying my improvement.

My invention relates to purifiers constructed in sections, and united by means of bolts passing through flanges formed upon the sections. Heretofore, in purifiers of this class, the interior flanges of the water-cup have either projected upon the inside of the gas-chamber, or else upon the inside of the water-cup itself, in the first of which cases they tend to diminish the area of the lime-trays, it being necessary either to make the trays sufficiently small to escape the flanges altogether, or else so to slot or break their confining edges or walls as to permit them to pass around the flanges, thereby greatly enhancing the cost of the trays, and diminishing their size, while in the second their position under water in the water-cup renders it extremely inconvenient to manipulate their confining-bolts.

The object of my present improvement is to obviate the difficulties recited, and to construct the interior flanges in such a manner as will not only give to the lime-trays the entire area of the gas-chamber, but also will place the flanges and their confining-bolts in such position as to be thoroughly accessible, and yet not be beneath the water in the seal, nor projecting within the gas-chamber, obviating also the necessity of any considerable or inconvenient width of the water-cup, and consequently diminishing the floor area of the purifier; to which ends my improvement consists of the devices hereinafter set forth and claimed.

A in the drawing represents the gas-chamber; B B, the side sections of the same; C C, the corner sections; D D, the bottom sections; E, the exterior flanges, constructed

and employed in the usual manner. F are the ledges for the lime-trays. The cover, the inlet and outlet passages, and the lime-trays, not being requisite to a comprehension of my improvement, are not shown. G are the interior flanges, in the construction and arrangement of which the substance of this my improvement lies. M are the interior confining-bolts.

A portion of the inner wall of the water-cup contiguous to the lines of connection of the side sections is depressed or otherwise carried inward to such an extent as to permit of the inner flange being completely embedded, so to speak, within the portion so depressed—that is to say, the depressed portions occurring at every interior joint of the water-cup are bounded, or partially formed, by the interior flanges, and their interior dimension or concavity is such as to permit of the perfect manipulation of the confining-bolts, while neither any part of the flange, nor of the bolts or nuts, protrudes inward beyond the vertical plane, which is a continuation of the interior surfaces of the water-cup and side section proper, while the reverse side of the depression takes the form of an elevation or projection within the water-cup. O represents the depression.

From this structure it is obvious that while the bolts of the interior flanges and the flanges themselves are completely protected from water within the water-cup, they are also completely out of the way of the lime-trays. Their structure is such also as to permit of the convenient manipulation of the bolts, the flanges being equally effective and much less inconvenient and in the way than in the old devices.

Any other form of depression than that shown in the drawing may be employed. The interior flanges may be of any desired conformation.

A purifier constructed in this way can of course be enlarged in the same manner as any sectional purifier can be, and possesses every advantage possessed by the ordinary forms.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

A gas-purifier constructed in sections, the interior flanges of each of which sections are located in a depression or other recess formed in the inner wall of the water-cup, in such manner that the flanges do not project into the water-cup, nor yet into the gas-chamber, but are completely embedded within the depressions, not exposed to water, and do not

project into the gas-chamber at all, substantially as shown and described, and to the ends set forth.

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

PETER MUNZINGER.

Witnesses:

J. BONSALE TAYLOR,  
W. C. STRAWBRIDGE.