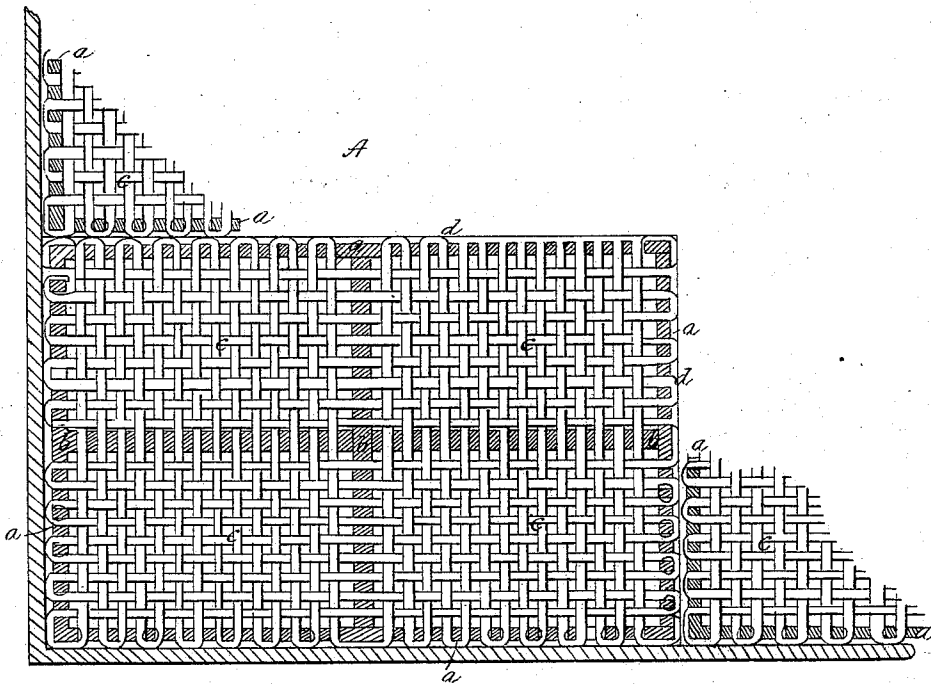
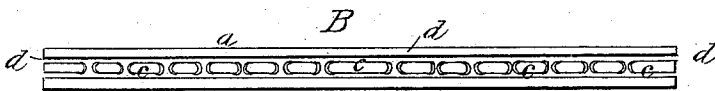


E. DUFFEE.

Gas Purifier.

No. 58,393.

Patented Oct. 2, 1866.



Witnesses:

J. B. Kidder
M. W. Frothingham

Inventor:

E. Duffee
by his Atty
Crosby & Gould

UNITED STATES PATENT OFFICE.

EDWARD DUFFEE, OF HAVERHILL, MASSACHUSETTS.

IMPROVEMENT IN SCREENS FOR DRY-GAS PURIFIERS.

Specification forming part of Letters Patent No. 58,393, dated October 2, 1866.

To all whom it may concern:

Be it known that I, EDWARD DUFFEE, of Haverhill, in the county of Essex and State of Massachusetts, have invented an Improved Screen for Dry Coal-Gas Purifiers; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

Letters Patent No. 56,490 were granted July 17, 1866, upon an improved screen for dry coal-gas purifiers made by me. Said invention consisted in "constructing screens for dry coal-gas purifiers of strips of thin wood crossing each other, and either riveted together or interlaced in the form of basket-work, supported by a frame-work of metal, or its equivalent."

My present invention relates to an improvement upon such construction made by me, which construction is defective in that when the filling is made of interlaced and continuous strips the projection of such strips beyond the edges of the frames prevents the adjacent edges of the respective frames making up each horizontal screen from closely abutting, and causing a weakening and breaking of the strips from abrasion.

My present invention is designed to remedy this defect, and consists in grooving the outer edges of each frame, so that where the strips pass along such edges they shall be sunk be-

low the general surface of such edge, this construction permitting the adjacent frames to abut closely together and against the inner side of the purifier, and preventing abrasion and wear of the interlacing strips.

The drawings represent, respectively, a horizontal section and an edge view of one of the frames.

a denotes the outer bars; *b*, the cross-bars; *c*, the long thin strips of wood, passed continuously through holes bored through the bars, and crossed and interlaced, as will be readily understood.

The outer edge of each bar *a* is grooved out, as seen at *d*, to a width corresponding to or a little in excess of the width of the interlacing-strips, and to a depth sufficient to allow the strip to be sunk below the general surface of the edge of the bar, as seen in the drawings.

I claim—

In a screen for dry coal-gas purifiers made up of crossed or interlaced thin strips of wood supported by a frame-work, grooving the outer edges of each frame so that the strips shall be embedded in or sunk below the surface of each outer edge, to prevent abrasion and to allow the frames to abut closely together, substantially as set forth.

EDWARD DUFFEE.

Witnesses:

GEORGE STEVENS,
A. B. JAKES.