

J.A. Miller's Imp^d. Ashes Cleaner.

PATENTED

JAN 14 1868

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Fig. 1

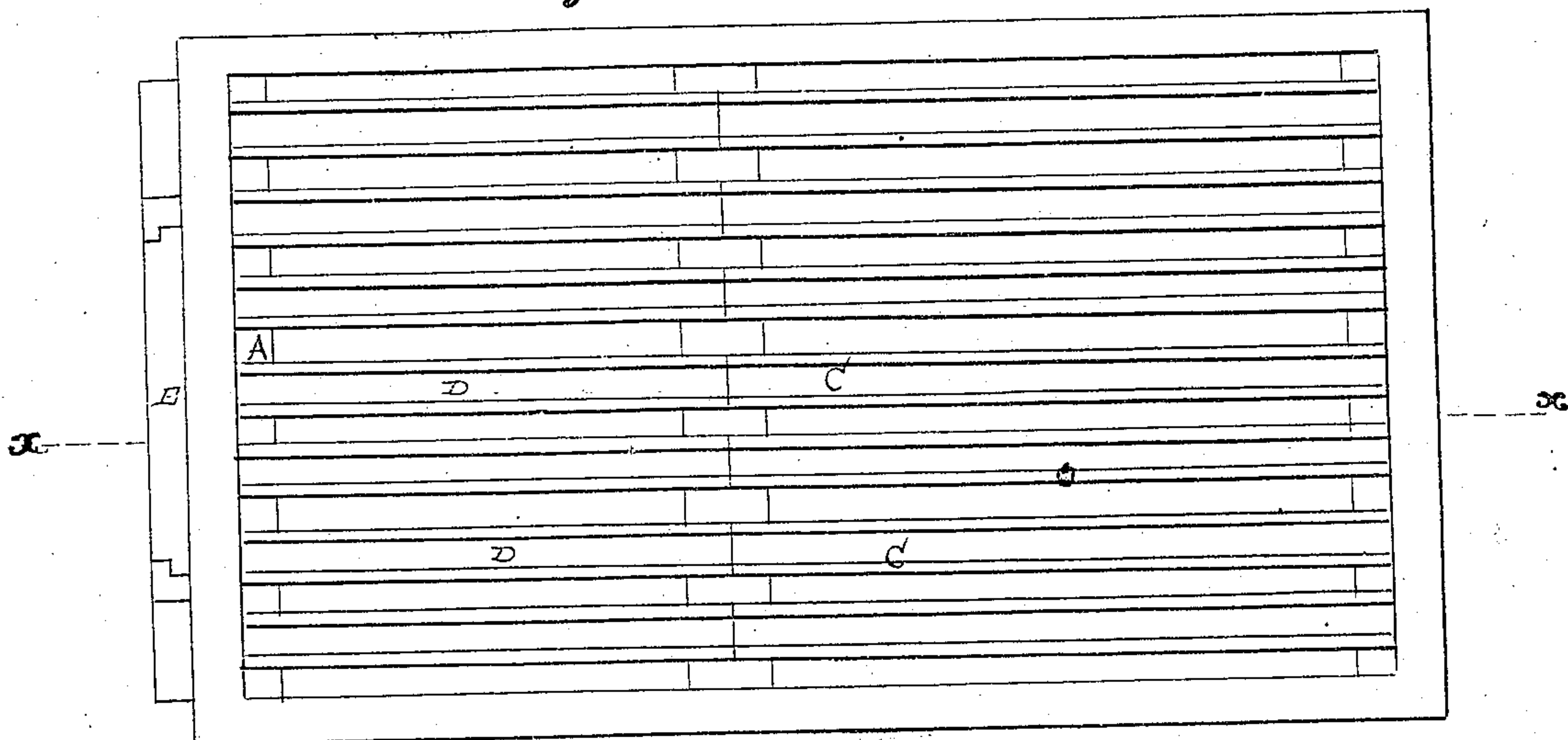
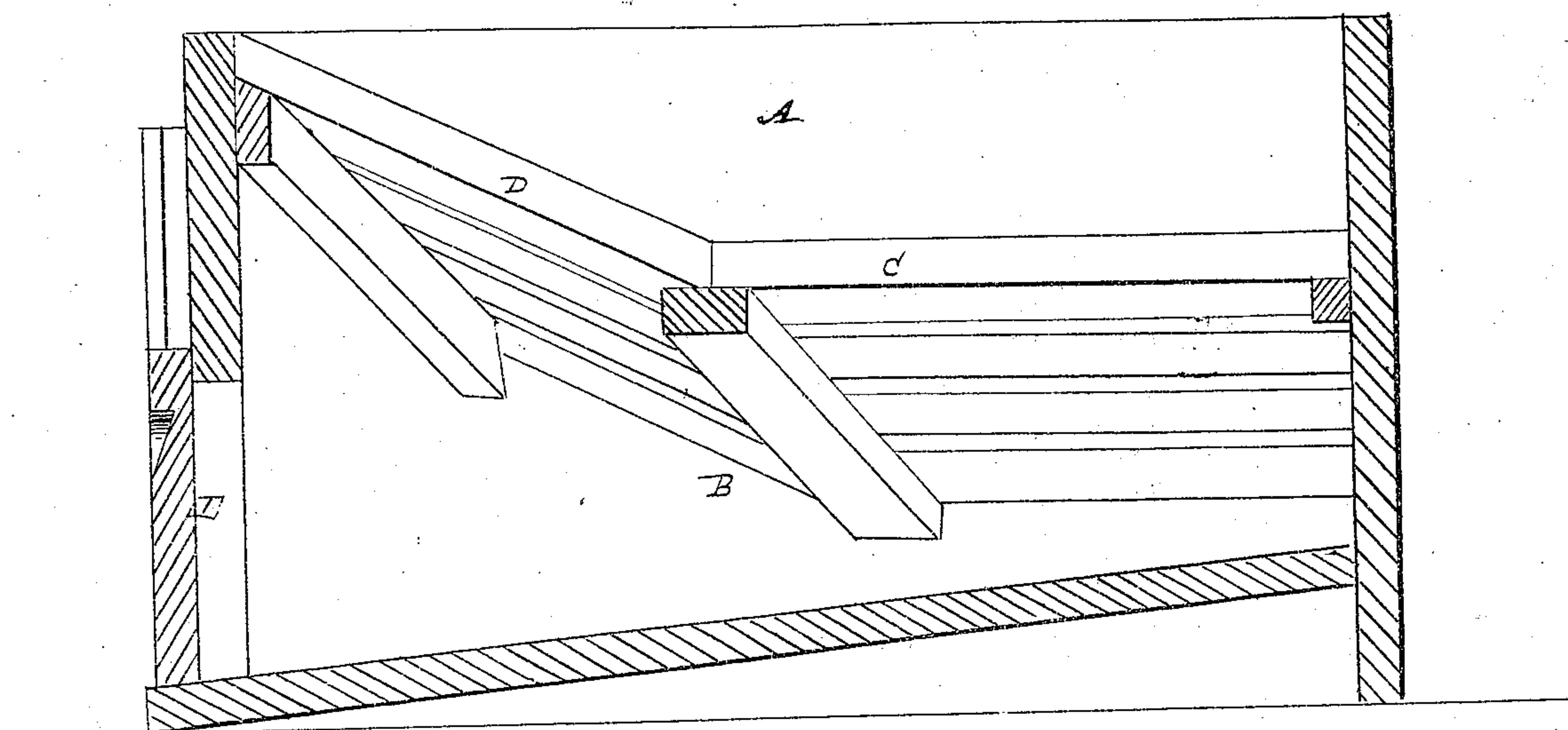


Fig. 2



Witnesses,

*Mcnamely
A. Sellers*

Joseph A. Miller

United States Patent Office.

JOSEPH A. MILLER, OF NEW YORK, N. Y.

Letters Patent No. 73,361, dated January 14, 1868.

IMPROVEMENT IN ASH-SIFTERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSEPH A. MILLER, of the city, county, and State of New York, have invented a new and useful Improvement in Ash-Sifters or Cleaners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figure 1 represents a plan of an ash-cleaner in illustration of my improvement, and

Figure 2 a vertical section thereof, taken as indicated by the line *xx* in fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to cleansing ashes by washing them, in contradistinction to sifting them in a dry state or condition, and consists in the employment of a water-box or case made up of upper and lower chambers, as established by a dividing screen or grate-shelving, or inclining upwards towards one of its ends, so that, in washing the cinders to cleanse them of fine ash, dirt, and dust, by filling the box with or introducing water thereto, the ashes or cinders may be worked or jerked towards and up the incline, by means of a hoe or other suitable device to facilitate the separation and extraction of clinkers. And, furthermore, said invention consists in providing the lower chamber of such a divided box with a gate or outlet for the water to carry off with it the fine ash and dust separated from the coal or cinder in the process of washing. This my invention may either be put into practice as a permanent fixture or structure, for use either on a large or small scale, as desired. Where desired for domestic use, it may be made portable, but for manufacturing purposes need not be so.

Referring to the accompanying drawing, A represents the upper chamber and B the lower one of the box, established or divided by a series of grate-bars, C, inclining upwards, at or towards the one end of the box, or joining other bars D so arranged. Instead of such a grate, a perforated plate may be used, but it is preferred to use bars running in direction of the length of the box, with the inclined bars situated in front, though a different construction or disposition of the bars may be adopted. The lower chamber B is shown, provided with a sluice or gate, E, to allow of the water and fine ash or dust to run off. To cleanse ashes or cinders, the ashes are thrown on to the grate, and the box filled with water, when a man with a hoe or other suitable device gives them a jerking motion, and draws them towards and up the inclined portion of the grate, where clinkers are easily extracted, and which action assists the cleansing process. Where there is an abundant supply of water, an opening in the lower chamber may be established, by lifting the gate E, or otherwise, so as to allow of a constant stream being used, and carrying off the fine ashes and dust with it; but where water is scarce, the chamber B should be kept closed, and the same water used till the fine ashes and dust accumulate below to the height of the grate, or thereabouts, when they may be hauled out.

Ashes thus cleansed are cleaner than when sifted in a dry state or condition, and there is no flying about of objectionable dust.

What is here claimed and desired to be secured by Letters Patent, is—

The combination, in a box or case, of the upper and lower chambers A B, grate C D, the one portion, D, of which inclines upwards, and sluice or gate E, for cleansing ashes or cinders by a water-process, essentially as herein set forth.

JOSEPH A. MILLER.

Witnesses:

J. W. COOMBS,

A. LE CLERC.