

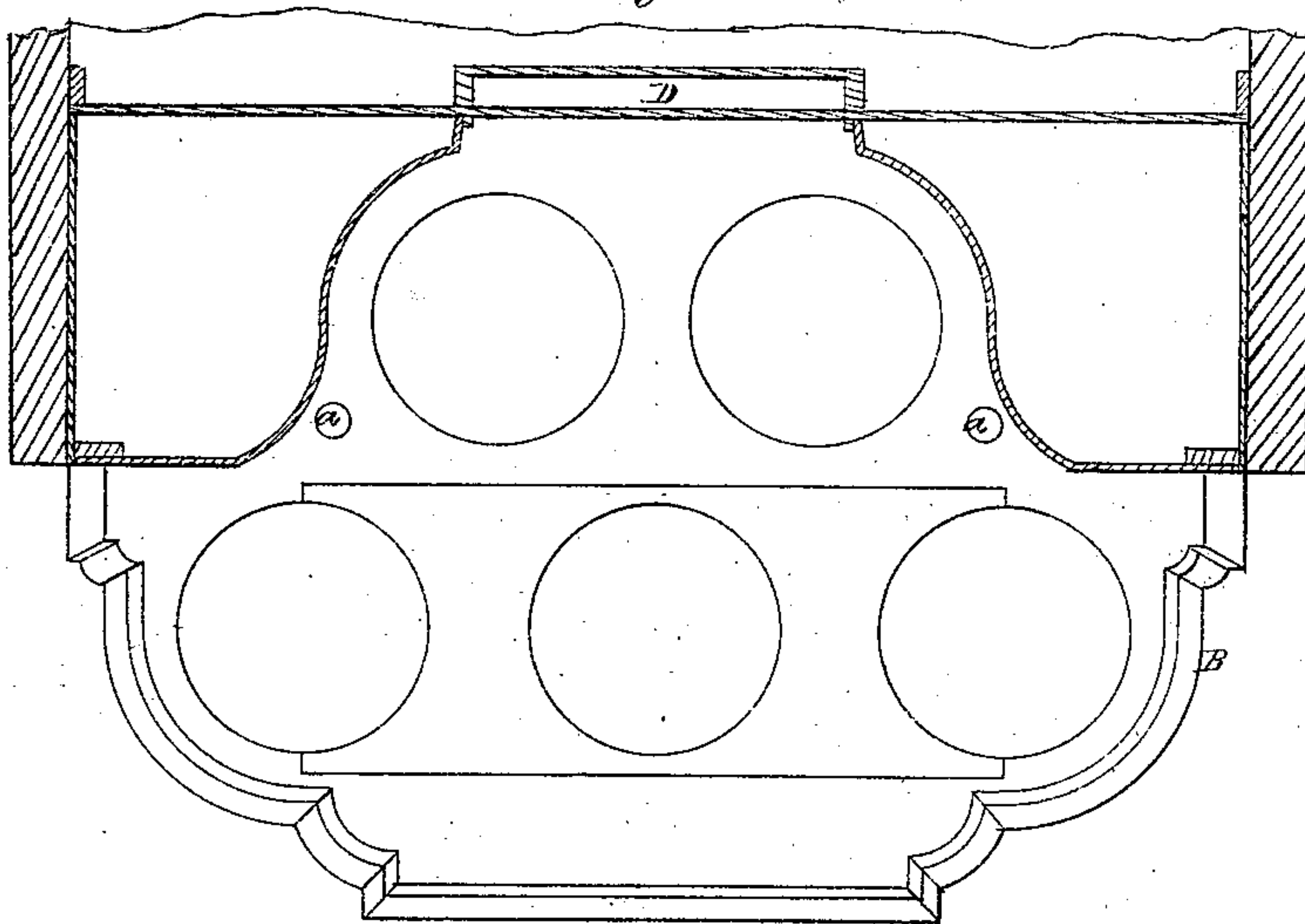
117096

*Edward Mingay.*

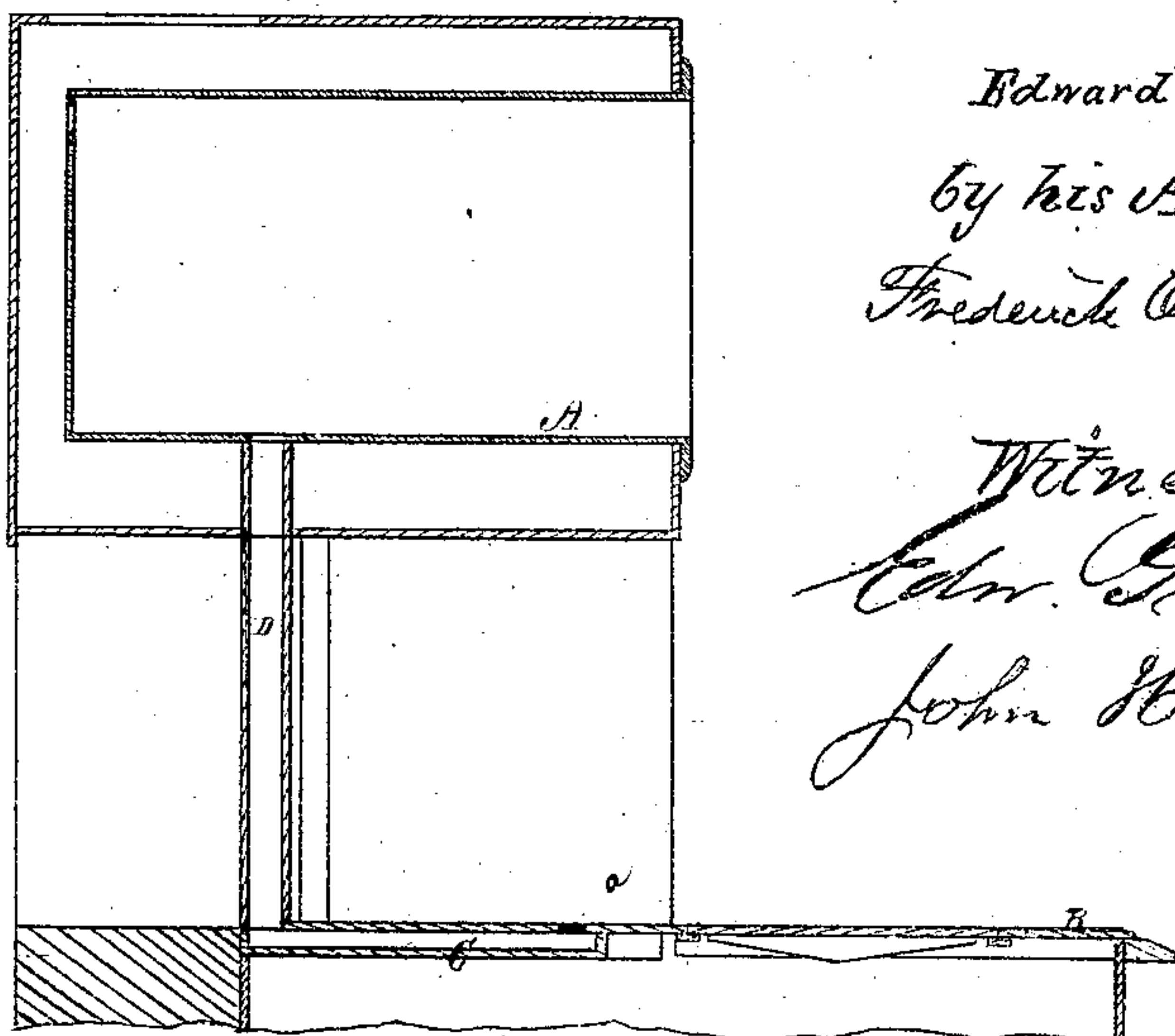
*Impt in Stores.*

PATENTED JUL 18 1871

*Fig. 1.*



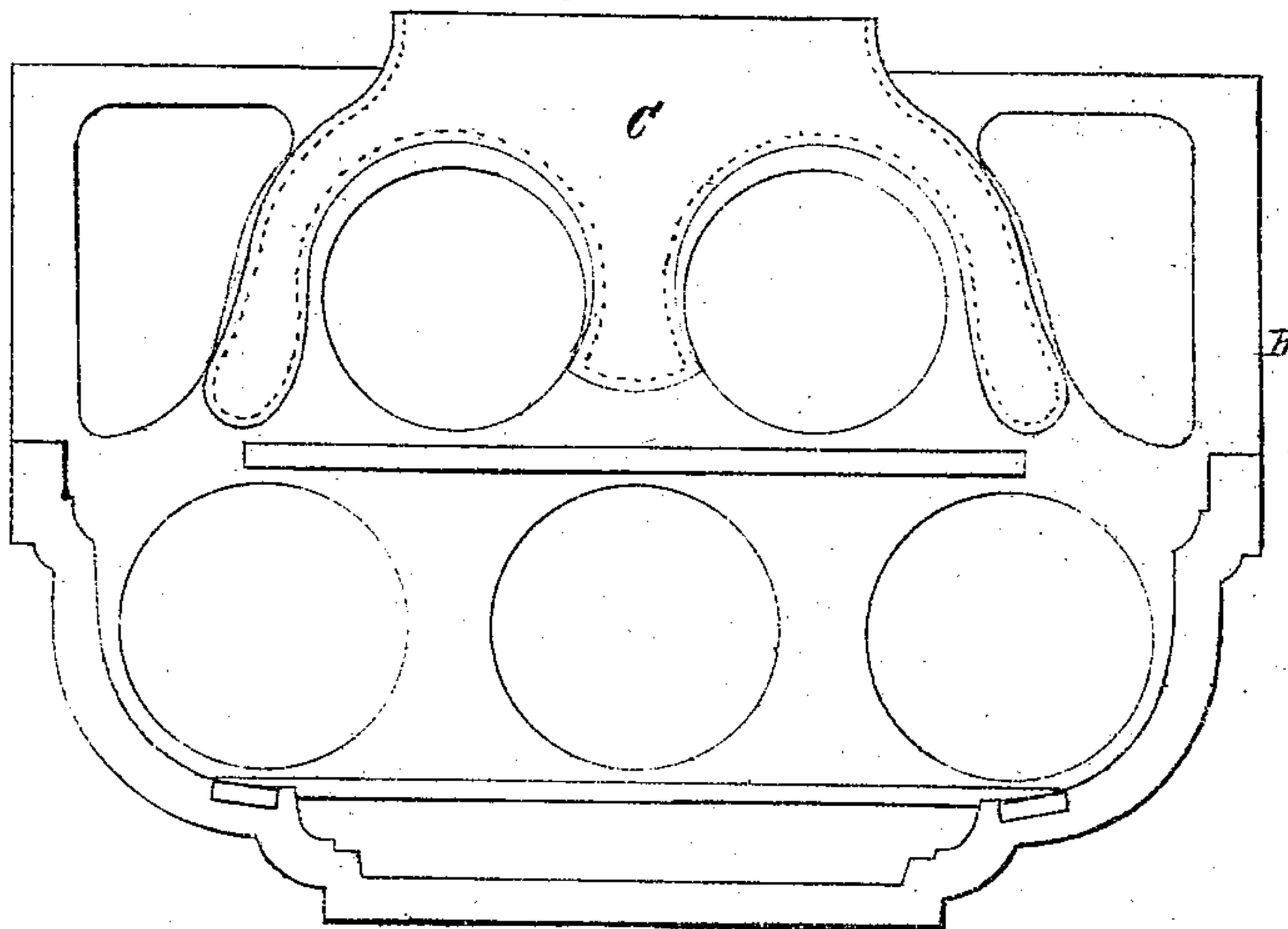
*Fig. 2.*



*Edward Mingay.*  
*by his Attorney.*  
*Frederick Curtis.*

*Witnesses.*  
*Edw. Griffith.*  
*John B. Mills.*

*Fig. 3.*



# UNITED STATES PATENT OFFICE.

EDWARD MINGAY, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN COOKING-RANGES.

Specification forming part of Letters Patent No. 117,096, dated July 18, 1871.

*To all whom it may concern:*

Be it known that I, EDWARD MINGAY, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have made an invention of a new and useful Improvement in Cooking-Ranges; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawing making part of this specification, and in which—

Figure 1 is a horizontal, and Fig. 2 a vertical section of a portion of a cooking-range containing my improvement. Fig. 3 is a plan view of the range from underneath, showing the bottom plate of the air-heating chamber, hereinafter referred to.

The object I have had in view in originating my present invention has been to rarefy a small quantity of pure air and conduct the same to the oven of the stove or range, in order to reduce the temperature of the top of the stove and protect it from injury, as well as to convey a certain additional amount of heat to the interior of the oven, and to ventilate the same.

The accompanying drawing represents at A the elevated ovens, and at B the top plate of a cooking-range. The top plate B is, in part, hollow, as shown at C, while the rear wall of the oven is formed with vertical flues or passages D D communicating with the interior or heat-receiving

chamber C and the interior of each oven. Two or more air-inlet orifices, *a a*, are formed in the upper plate of the chamber or air-heating space C, in order that air from the apartment may enter thereat by the action of the draught induced through such chamber by the rarefaction of the air within it, the air thus heated passing, by natural laws, to the interior of each oven through the flues D D.

The employment of the double top plate B and the automatic circulation of fresh air through it *en route* to the ovens are productive of very good results, inasmuch as they, as before premised, not only reduce the temperature of the top plate and retain it intact from serious injury, but both ventilate and aid in heating the interior of the oven or ovens.

I claim—

As an improvement in cooking-stoves or ranges, &c., the adoption of a hollow, double, or tubular top plate having air-inlet orifices leading to the interior thereof and outlet-passages for the air passing through it to enter the oven, for purposes herein stated.

EDWARD MINGAY.

Witnesses:

FRED. CURTIS,  
EDW. GRIFFITH.