

J. McDONALD.
Brick Kiln.

No 67,783.

Patented Aug. 13, 1867.

FIG. 1

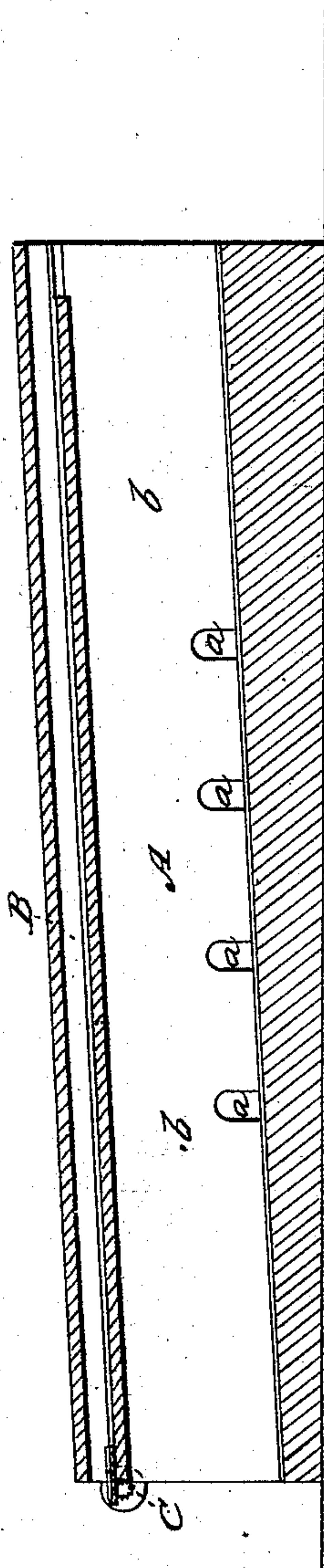
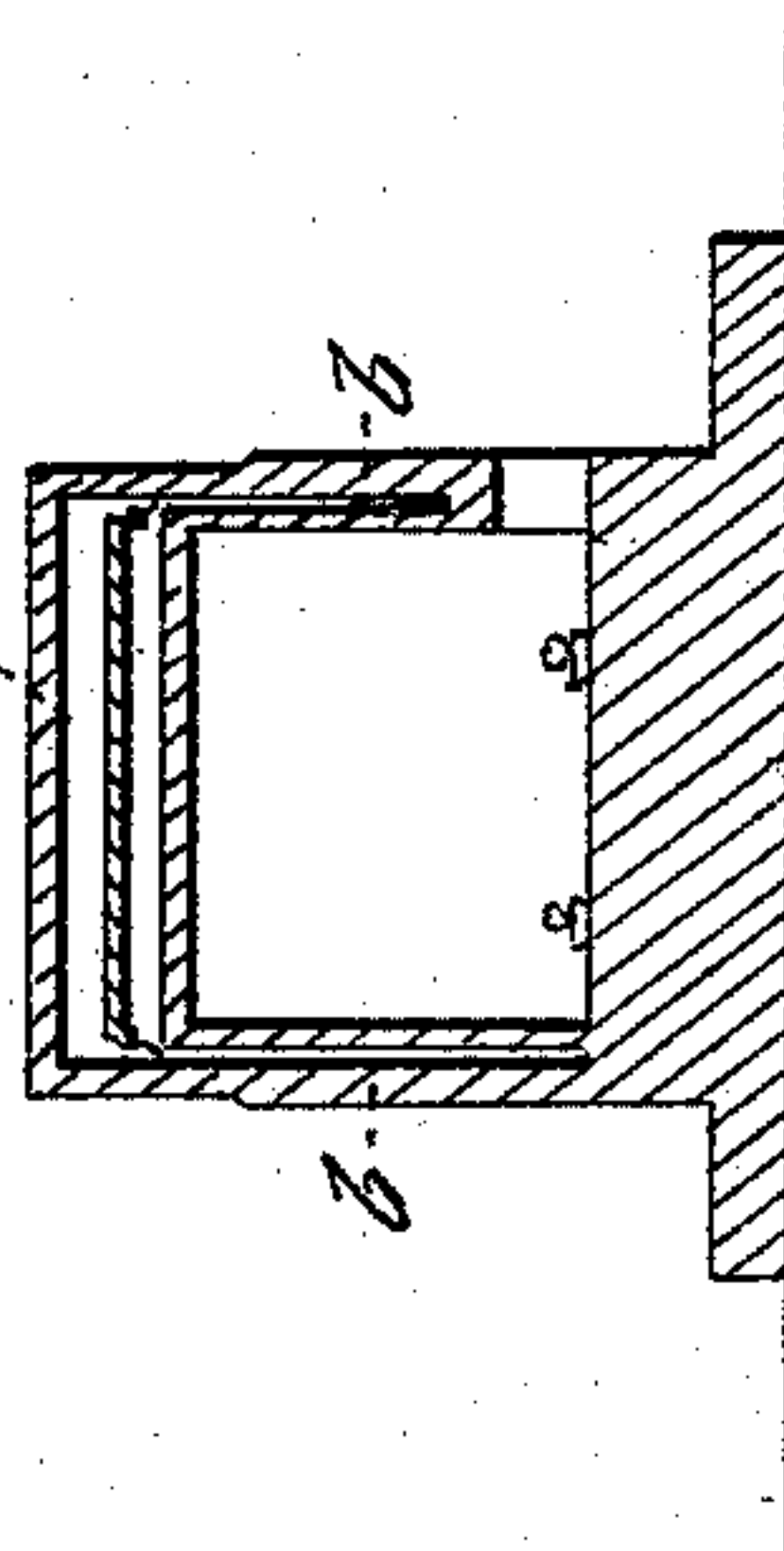


FIG. 2



WITNESSES:

F. A. Jackson
Wm. T. Brown

INVENTOR:

Jno. McDonald
Per Messrs. Co
attorneys

United States Patent Office.

JOHN McDONALD, OF SARATOGA SPRINGS, NEW YORK.

Letters Patent No. 67,783, dated August 13, 1867.

IMPROVED BRICK-DRYER.

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, JOHN McDONALD, of Saratoga Springs, in the county of Saratoga, and State of New York, have invented a new and improved Brick-Dryer; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical longitudinal section of my invention.

Figure 2 is a vertical cross-section of the same.

This invention relates to an apparatus in which the heat which is used for burning brick is further utilized for the purpose of drying the same.

The invention consists in so constructing the kiln in which the brick are burned, and providing the same with hollow walls and other devices, that all the heat that escapes from the process of burning brick is brought to or around a chamber in which the brick are dried.

A represents a kiln, through which the brick to be burned are passed, on cars which run on a track at the bottom of the kiln. The fire-places *a a* are so arranged that the brick are burned as they pass through the fire. The walls *b b* which enclose the kiln A are hollow, so as to let the heat rise in the hollow space to the chamber B, which is arranged directly above the kiln. The ceiling *c* of the kiln, which forms the floor of the chamber B, also serves to transfer the superfluous heat from the kiln to the drying-chamber. The brick, as they come out of the press, are brought into the drying-chamber, and are there brought from one end to the other of the chamber, either on cars or on an endless apron of any description. The cars, if such are used, are propelled by a spur-wheel on the driving-shaft C, (see fig. 1,) and belts of leather or of slats are also propelled by the driving-shaft C, or by any other suitable device. The construction and arrangement of the drying-chamber may be varied, and I do not wish to confine myself to any one particular kind and shape thereof.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

The kiln A, having hollow walls *h*, in combination with the drying-chamber B, substantially as described, for the purpose specified.

JOHN McDONALD.

Witnesses:

WM. F. McNAMARA,
ALEX. F. ROBERTS.