

J. E. PARK.
Cement-Kiln.

No. 133,664.

Patented Dec. 3, 1872.

Fig. 1.

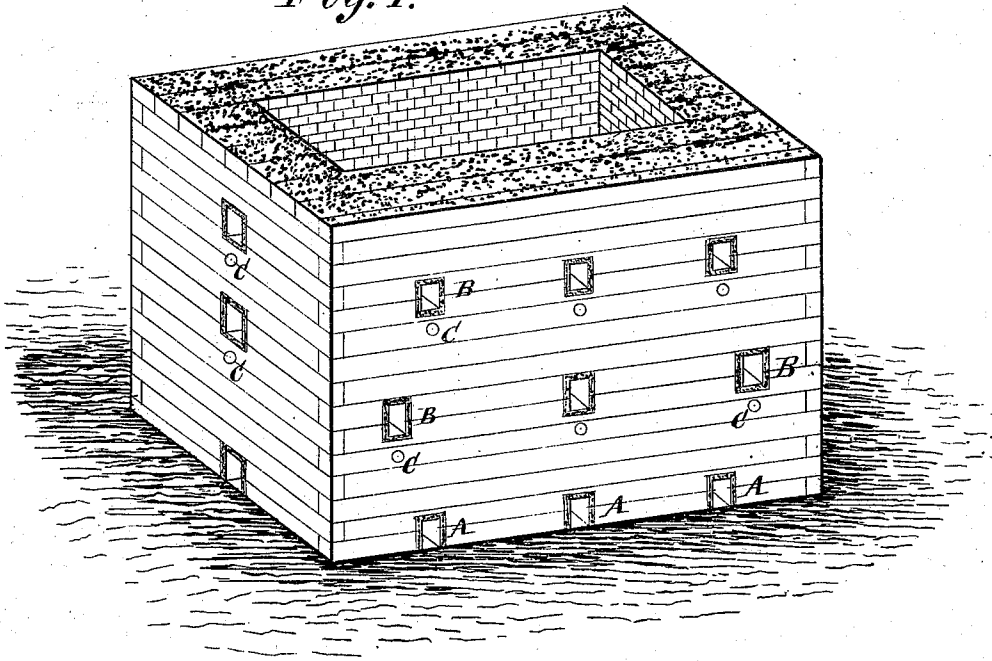
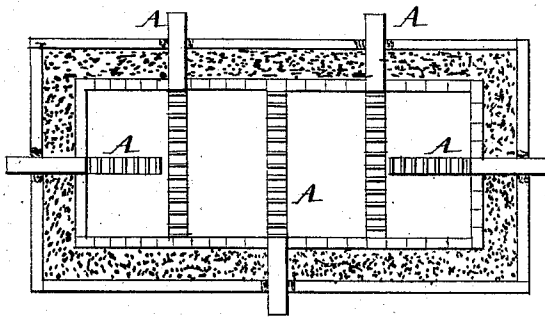


Fig. 2.



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PER [Signature]
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UNITED STATES PATENT OFFICE.

JOHN E. PARK, OF RUTHERFORD COUNTY, TENNESSEE.

IMPROVEMENT IN CEMENT-KILNS.

Specification forming part of Letters Patent No. **133,664**, dated December 3, 1872.

To all whom it may concern:

Be it known that I, Dr. JOHN E. PARK, of the county of Rutherford and State of Tennessee, have invented a Cement-Kiln and Process of Burning, of which the following is a specification:

Cement-kilns are ordinarily defective in respect of the arrangement of base-flues or furnaces, whereby the material to be burned is unequally heated or acted on by the flame.

My improvement consists in arranging the flues so as to traverse the whole width of the kiln and open alternately at one side and the other.

In the accompanying drawing, Figure 1 is a perspective view of a kiln; and Fig. 2, a plan view, showing my improved arrangement of furnace-flues.

The base-flues A extend transversely across the kiln, and open or have their mouths alternately on opposite sides thereof. Thus the cement material will be equally heated whether it lie near one side of the kiln or the other, and the result of such action of the flame is a product of a homogeneous nature in place of the imperfect one obtained under the old arrangement of flues, in which the material on one side of the kiln was subjected to a heat much more intense than that on the

other, whereby the cementitious quality of the same is often greatly impaired. In relation to hydraulic cement and its uses this result is highly important.

I have shown a series of upper flues, B, and watch-holes near the same, built with hearths projecting into the interior of the kiln.

The advantage of such provision of supplementary furnaces is obvious, as regards the proper heating of the mass of material removed from the immediate or most powerful influence of the heat or flame of the base flues A.

The form of kiln is preferably rectangular and oblong.

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

The arrangement of the base-flues or furnaces A, the same traversing the kiln and opening alternately on opposite sides thereof, as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in the presence of two witnesses.

JOHN E. PARK.

Witnesses:

ROBERT MCCOY,
E. F. WILSON.