## SAMUEL C. BREWER.

Brick Kilns.

No. 116,016.

Patented June 20, 1871.

Fig.1.

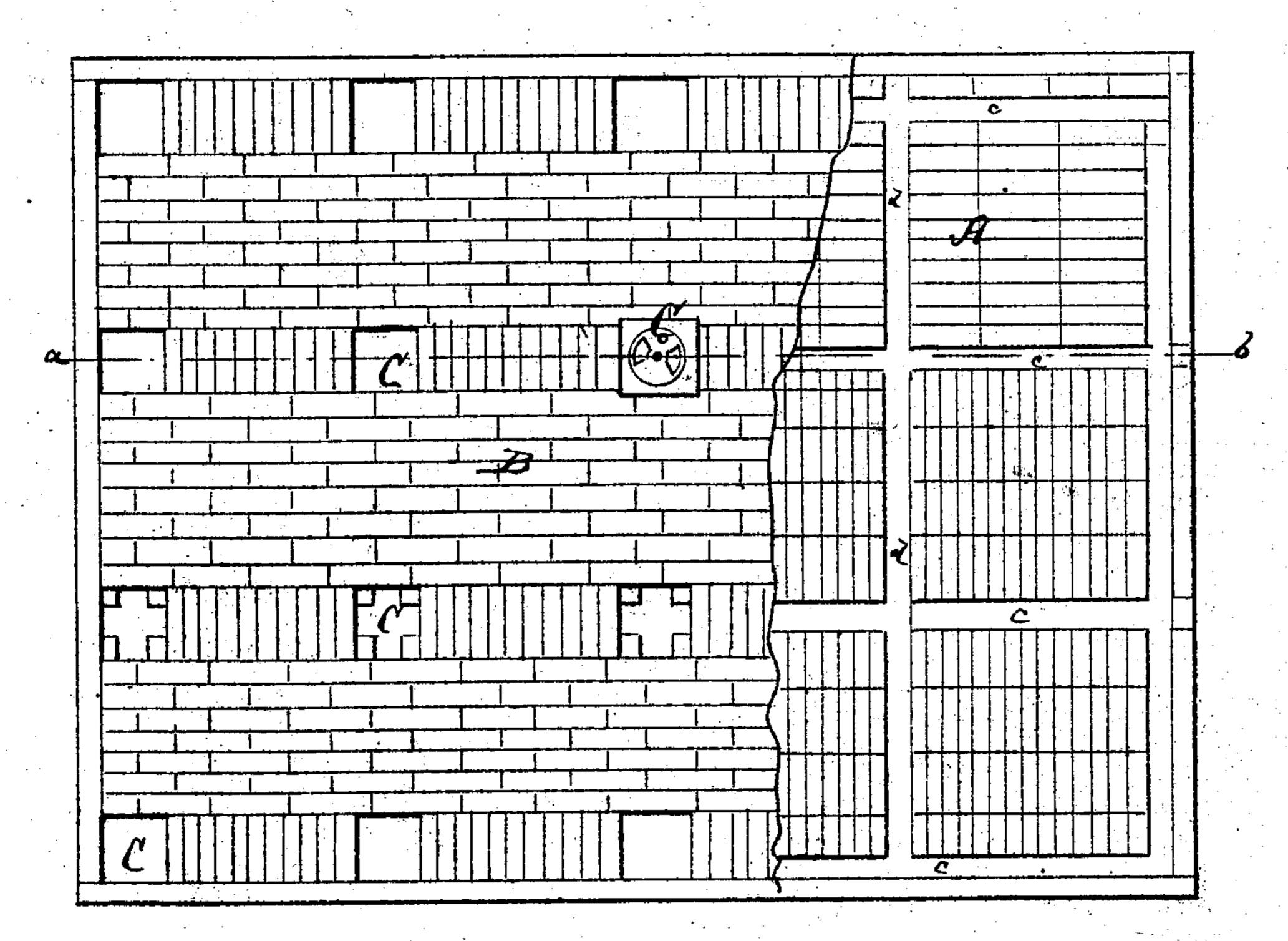
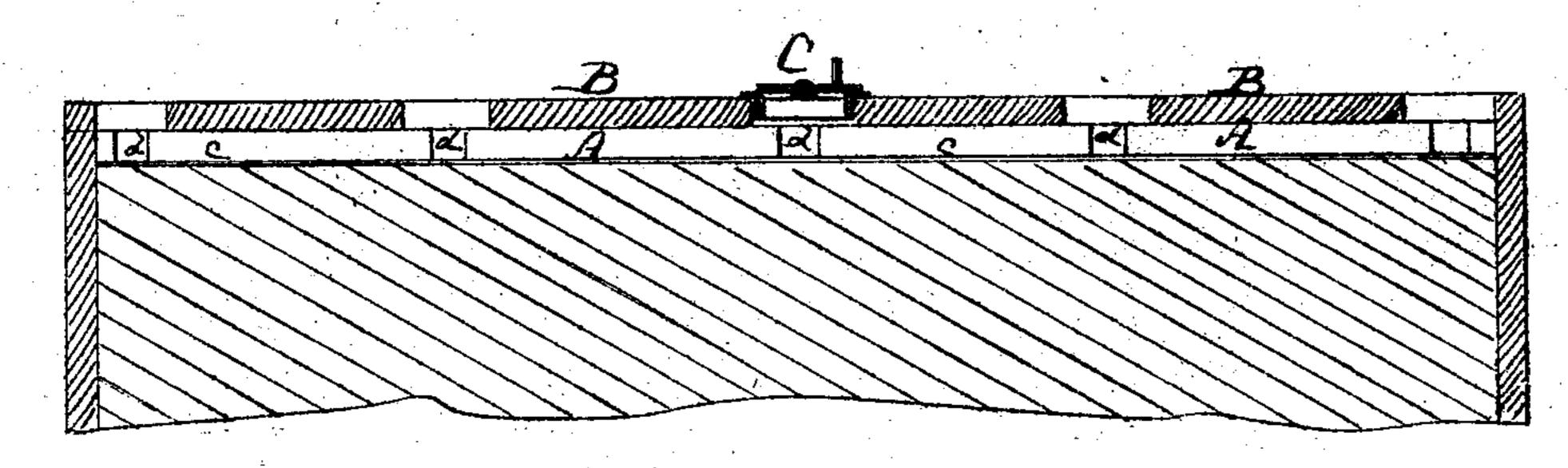


Fig. 2



Mittendage.

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## UNITED STATES PATENT OFFICE.

SAMUEL C. BREWER, OF WATER VALLEY, MISSISSIPPI.

## IMPROVEMENT IN BRICK-KILNS.

Specification forming part of Letters Patent No. 116,016, dated June 20, 1871.

To all whom it may concern:

Be it known that I, SAMUEL C. BREWER, of Water Valley, in the county of La Fayette and State of Mississippi, have invented a new and Improved Brick-Kiln; 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 drawing forming part of this specification, in which—

Figure 1 represents a plan or top view of my improved brick-kiln. Fig. 2 is a vertical section of the same taken on the plane of the line a b, Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

My invention consists in improving the construction of brick-kilns, as hereinafter fully described and subsequently pointed out in the claim. The overburning of some and insufficient burning of other bricks can thereby be prevented, as well as the unnecessary waste of fuel. My invention consists in the application to the top of the kiln of a series of horizontal intersecting flues, and of registers above the crossings of the flues, whereby the products of combustion can be directed in their course.

Upon a brick-kiln of suitable size and shape, and built up of raw brick in the well-known

manner, with furnaces, eyes, and crevices for the proper distribution of heat, is placed a course, A, of bricks in such manner as to leave horizontal, longitudinal, and transverse flues c c and d d, which intersect each other, as indicated in Fig. 1. The outermost flues are quite close to the verge of the kiln. All the flues are in proper connection with the smokecrevices, so that all the products of combustion enter the same. Upon the course A is laid another course, B, of bricks, which are set on edge and close together, so as to cover the flues c d. The brick of the top course B are preferably fire-brick, so as not to be injured by rain-water. Cement may be used to securely close the joints in the top course B and prevent the escape of heat through crevices.

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

ent-

The arrangement, upon the top of the kiln, of the course A of bricks, forming a series of intersecting and horizontal flues, cd, and thereabove the edge-laid course B of fire-brick, with registers C therein, all as and for the purpose specified.

SAML. C. BREWER.

Witnesses:

W. A. HERRING, J. N. GOUT.