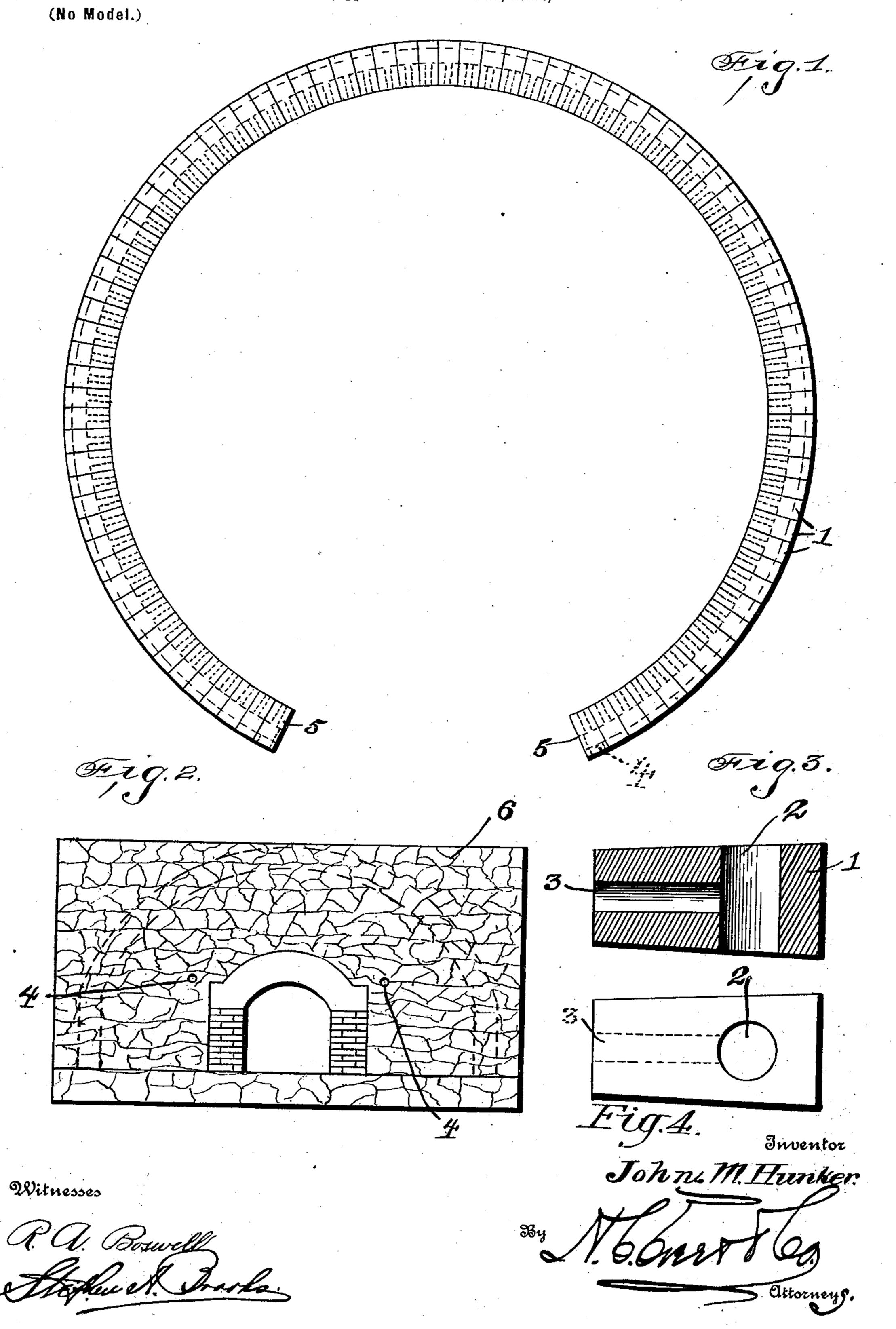
J. M. HUNKER. COKE OVEN.

(Application filed Mar. 18, 1901.)



United States Patent Office.

JOHN M. HUNKER, OF WEST SUPERIOR, WISCONSIN, ASSIGNOR OF ONE-HALF TO EDMOND T. SAFFORD, OF SUPERIOR, WISCONSIN.

COKE-OVEN.

SPECIFICATION forming part of Letters Patent No. 711,500, dated October 21, 1902.

Application filed March 18, 1901. Serial No. 51,797. (No model.)

To all whom it may concern:

Be it known that I, John M. Hunker, of West Superior, in the county of Douglas and State of Wisconsin, have invented a new Improvement in Coke-Ovens; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the figures of reference marked thereon.

for a natural and distributed draft by means of a tier or row of fire-bricks with holes and cross-holes through them built into the oven and so arranged as to make a complete plan or system of draft, causing the air to enter the oven through these holes from all sides of the oven in about equal proportions, the size of the holes to vary according to the required air circulation.

Referring to the accompanying drawings, Figure 1 is a horizontal section of a coke-oven embodying the present invention. Fig. 2 is a front elevation thereof. Fig. 3 is a vertical section of one of the bricks employed in the present invention, and Fig. 4 is a side eleva-

tion thereof.

In the drawings the numeral 1 designates the blocks, each having a transversely-arranged opening 2 formed therein and a smaller longitudinal opening 3, said longitudinal opening having its inner end in communication with the transverse opening 2 and its outer end terminating at the end of the brick. In constructing the oven a row of these blocks are built into the oven-wall at a point above where the coal will come in the oven and having their longitudinal openings 3 communi-

cating with the interior of the oven and their transverse openings 2 registering with each other, and thereby forming a continuous 40 passage or air-chamber extending entirely around the oven. This air-chamber communicates with the exterior through the openings 4 in the end bricks 5.

6 indicates the oven-front, which may be 45

of any desired construction.

From the foregoing description it will be obvious that through the medium of the air-chamber formed in the row of blocks a perfect draft can be maintained, the air being 50 admitted therefrom through the longitudinal openings 3 to the interior of the oven.

Having thus described my invention, I

claim—

1. A coke-oven in the walls of which is arranged a series of blocks, said blocks formed with centrally - arranged longitudinal and transverse openings, said transverse openings communicating with each other, thereby forming a continuous passage, and the longitudinal openings forming a series of direct communication between the exterior and the interior of the coke-oven.

2. A coke-oven in the walls of which is arranged a series of blocks, extending in an ap- 65 proximate parallel plane, said bricks formed with longitudinal and transverse openings, whereby a natural draft can be provided for the coke-oven, substantially as described.

J. M. HUNKER.

Witnesses:

THOMAS MCINTOSH, HENRY TITUS.