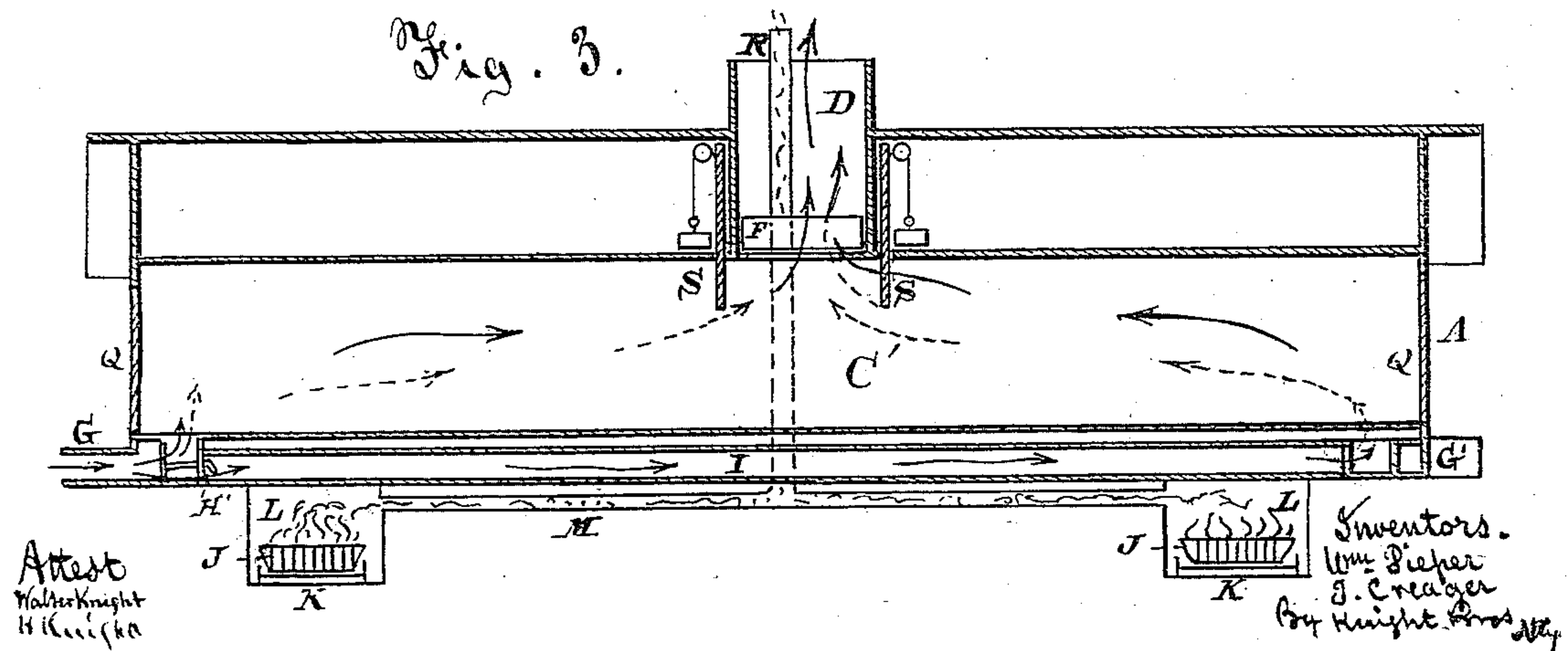
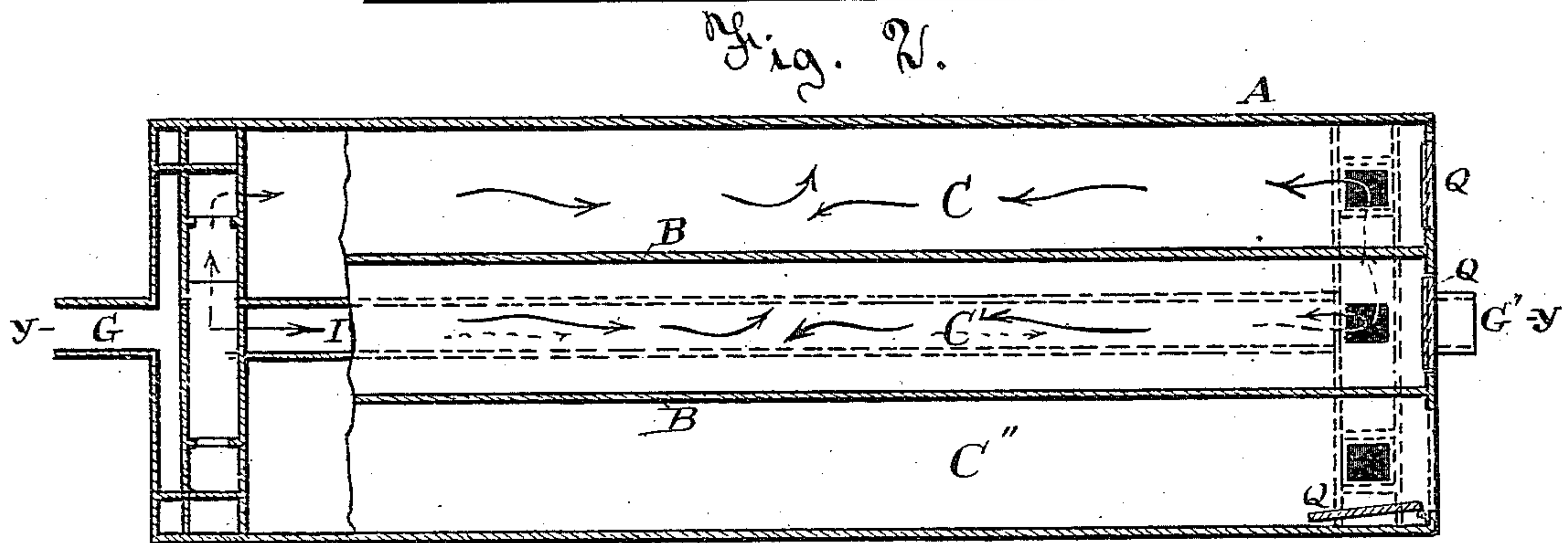
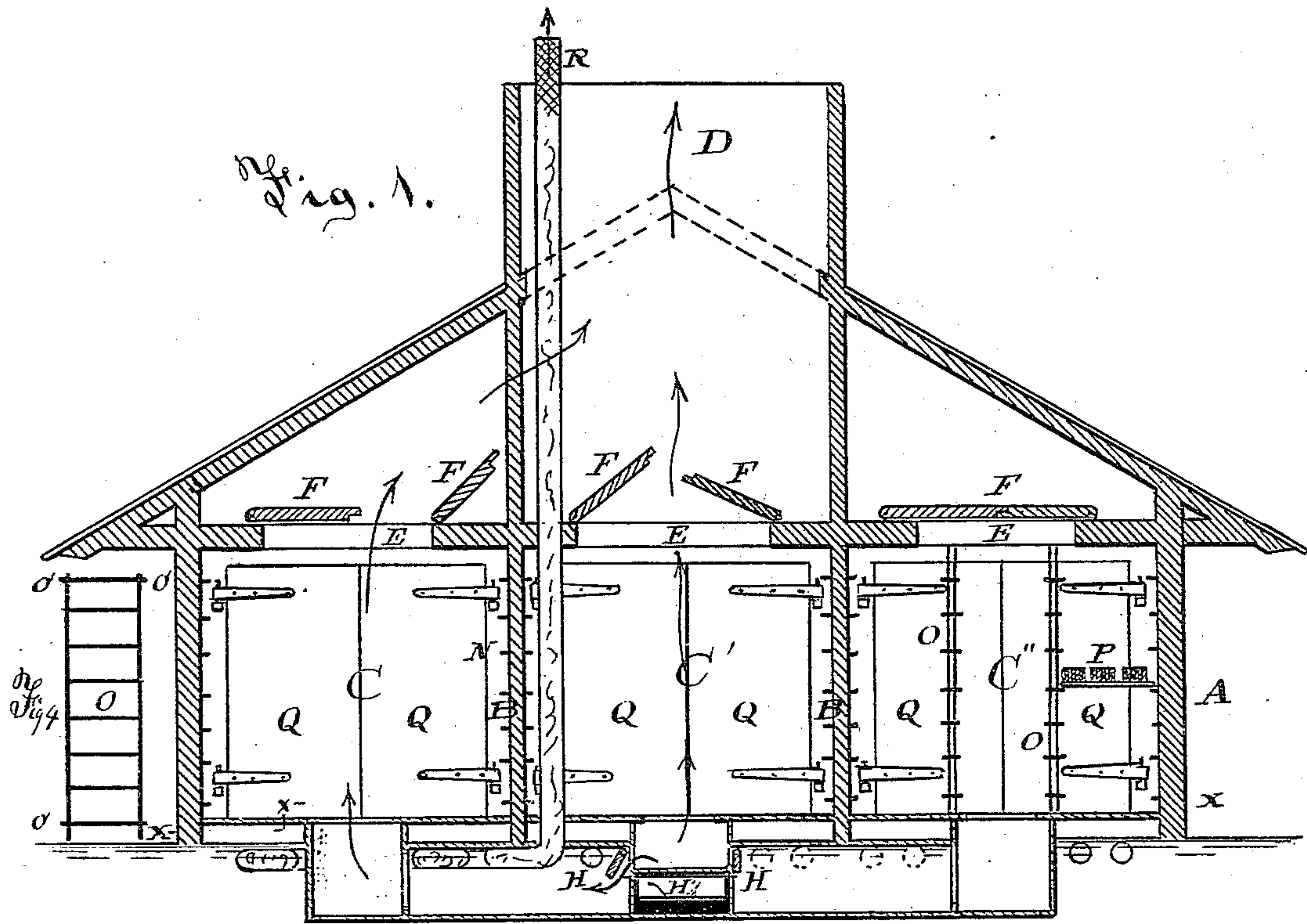


W. PIEPER & J. CREAGER.
Apparatus for Drying Bricks.

No. 226,188

Patented April 6, 1880.



UNITED STATES PATENT OFFICE.

WILHELM PIEPER AND JONATHAN CREAGER, OF CINCINNATI, OHIO.

APPARATUS FOR DRYING BRICKS.

SPECIFICATION forming part of Letters Patent No. 226,188, dated April 6, 1880.

Application filed December 27, 1879.

To all whom it may concern:

Be it that known we, WILHELM PIEPER and JONATHAN CREAGER, both of Cincinnati, Hamilton county, Ohio, have invented new and useful Improvements in Apparatus for Drying Bricks, of which the following is a specification.

The object of our invention is an apparatus for the uniform, rapid, and effective drying of freshly-molded bricks, so as to fit them for the kiln.

In the accompanying drawings, Figure 1 is a transverse sectional elevation of a drying apparatus embodying our invention. Fig. 2 is a section to a reduced scale on the line *xx* of Fig. 1, the house being turned one-quarter round. Fig. 3 is a section to a reduced scale on the line *yy* of Fig. 2. Fig. 4 is a side elevation of one of our cleated removable racks.

A represents our dry-house; B, partitions, which divide the interior into three long and parallel compartments, C C' C'', any one or more of which may be placed in communication with a ventage or chimney, D, through passages E, capable of being opened, contracted, or closed, at will of the operator, by dampers F. Each compartment is capable of being closed at the end by doors Q. Each compartment is capable of being placed in communication, at either or both ends, with hot-air trunks G G' by opening of one or more of suitable registers, H.

The hot air may either be supplied at both ends of the building independently and simultaneously, or be supplied at one end, as at G, and be capable of being placed at option in communication with the other end by means of damper or register H' and connecting-duct I.

J represents cressets or fire-boxes, having wheels and occupying tracks K on the floors of pits L, which extend clear across underneath the building.

Mare pipes which extend longitudinally from pits L, one set under each compartment, and discharge into a chimney, R, which may be led up within the chimney D.

N represents cleats or ledges upon the walls and partitions, and O represents cleated removable frames or racks, upon which pallets or trays containing freshly-molded bricks are placed, as indicated at P.

Each compartment being provided with two sliding partitions, S S, enables the operator, by preventing access of one or other end of the compartment with the ventage, to confine the action to the other end. This provision enables the apparatus to be used economically with small batches of brick.

Our preferred mode of operating the apparatus is to so arrange the various registers and dampers as to cause an equal flow of hot air into both trunks G G', which air being led into the compartment to be treated equally and simultaneously at both ends, the two currents meet at mid-length of the building and escape, with their charge of moisture, at the central ventage or chimney, D. This action is aided by placing the shiftable fires J in communication with the pipes M of the compartment which, for the time being, holds the charge of freshly-molded bricks.

By having three similar compartments the operator is enabled to always have one compartment charged with recently-molded bricks while the other two compartments are respectively being supplied with fresh bricks and emptied of dried ones.

By temporarily closing the doors or dampers F the operator can at discretion increase the pressure and consequent heat in any compartment.

The removable racks are so constructed as to have their upper and lower cleats (see O, Fig. 4) project sufficiently to separate the rack-frames about one inch, in order to secure a free circulation of air among and between all the frames, and thus both equalize and expedite the drying operation.

We claim as new and of our invention—

1. A brick-drying house or apparatus having a series of parallel chambers, C C' C'', doors or dampers F at the top of each chamber, hot-air trunks G G' at each end, and chimney or ventage D at the center, the chambers C C' communicating with said ventage through suitable openings in the partitions B, substantially as set forth.

2. In combination with two or more chambers which receive hot air at both ends and discharge at a middle ventage, the movable fire-boxes or cressets J, which occupy pits L transverse of and underneath the series of

chambers, and which communicate with pipes M, leading to a central chimney, R, substantially as set forth.

3. In the described combination, with a series of chambers or compartments, C C' C'', for holding freshly-molded brick, and with hot-air ducts G G' I and ventages E, the dampers and registers H H' F, for regulating the said air, directing it to the several compart-

ments in succession, and controlling the heat therein, substantially as set forth.

In testimony of which invention we hereunto set our hands.

WILHELM PIEPER.
JONATHAN CREAGER.

Attest:

GEO. H. KNIGHT,
ANDERSON EVANS.