

(No Model.)

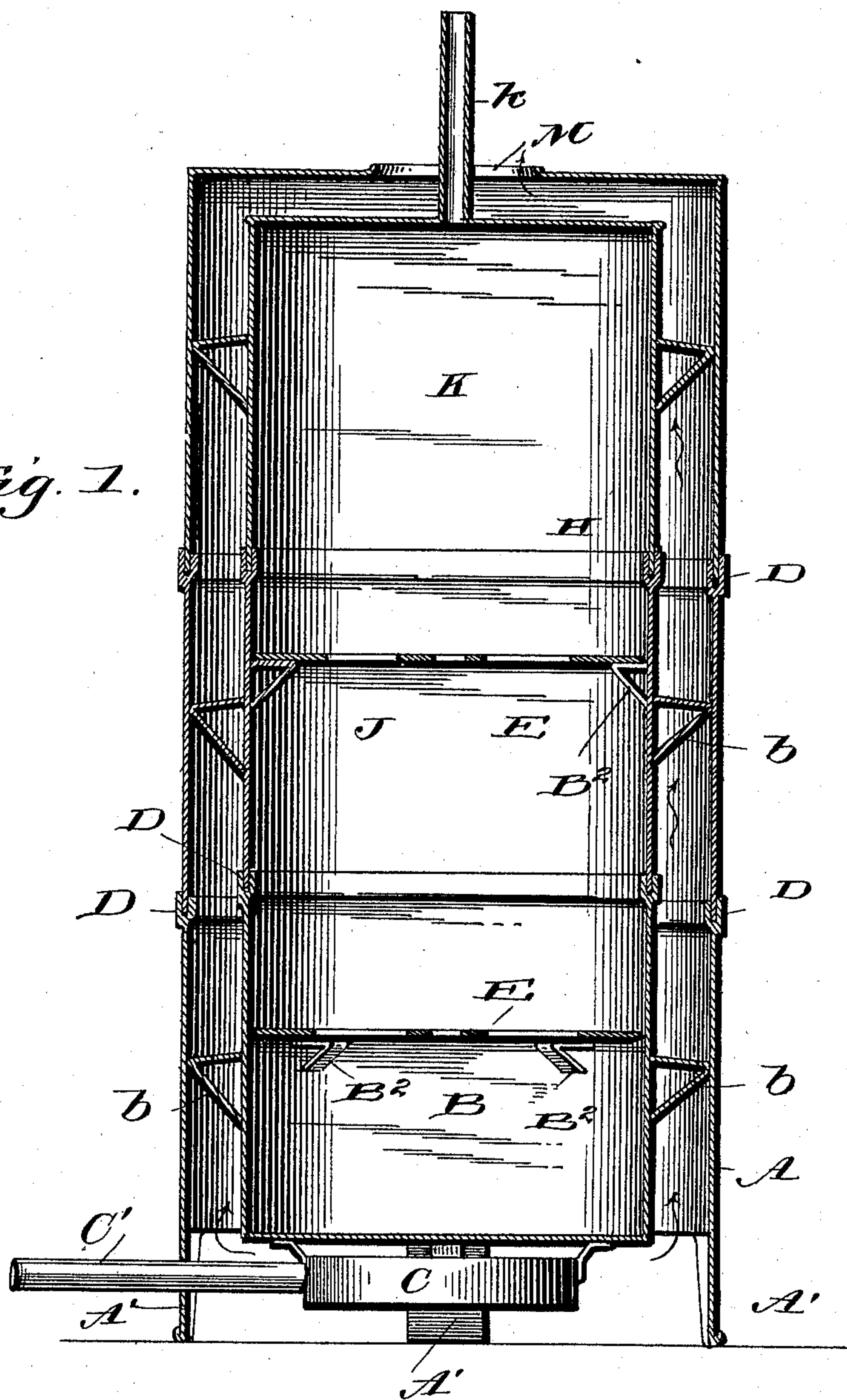
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G. JEFFERY.
CHINA KILN.

No. 585,765.

Patented July 6, 1897.

Fig. 1.



Witnesses:
L. C. Mills
A. L. Hough.

Inventor:
George Jeffery,
by Franklin A. Hough
Att'y.

(No Model.)

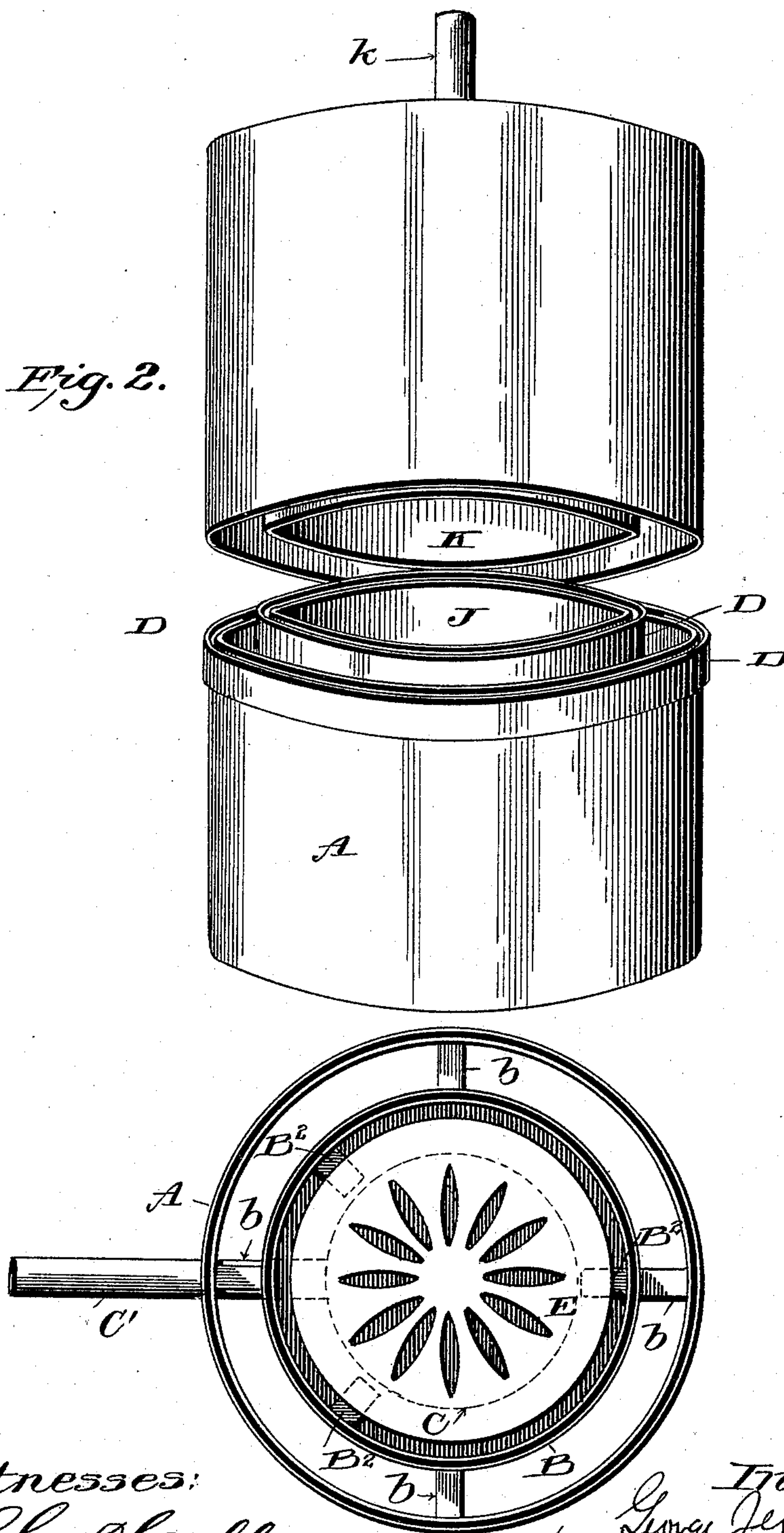
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CHINA KILN.

No. 585,765.

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Fig. 2.



Witnesses:

L. C. Hills.
A. L. Hough.

Inventor:

George Jeffery,
by Franklin H. Hough Atty.

UNITED STATES PATENT OFFICE.

GEORGE JEFFERY, OF PORTLAND, OREGON.

CHINA-KILN.

SPECIFICATION forming part of Letters Patent No. 585,765, dated July 6, 1897.

Application filed February 11, 1897. Serial No. 622,920. (No model.)

To all whom it may concern:

Be it known that I, GEORGE JEFFERY, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in China-Kilns; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in kilns which are adapted for use in firing decorated china, and especially to the provision of a kiln which is made up of compartments the ends of which are adapted to telescope within one another, the various sections each being provided with a tray on which the china may be held and the top section having an apertured cover, through which aperture extends a tube communicating with the interior of the kiln and through which the products of combustion from the pigments of the decorations on the china may escape during the firing process.

The invention consists, further, in the provision of a sectional china-kiln which is so constructed of compartments that the kiln may be taken apart and inserted through a door or cover of an ordinary heating-stove and the sections built up after being placed within the inclosure of the stove, whereby the walls of the stove will serve to retain and utilize the heat of radiation that would otherwise be lost.

To these ends, and to such others as the invention may pertain, the same consists, further, in the novel construction, combination, and adaptation of parts, as will be hereinafter more fully described, and then specifically defined in the appended claim.

I clearly illustrate my invention in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a vertical central sectional view through the kiln, which is shown as inserted within the stove. Fig. 2 are detailed views of the compartments of the kiln.

Reference now being had to the details of the drawings by letter, A designates the bottom portion of the outer casing of the kiln, which is supported on suitable legs A' and carries on suitable brackets b the interior compartment B, to the bottom of which, on the under side, is secured the burner C, which is held by means of arms to the said bottom and is provided with the pipe C', to which connection may be made with a gas-supply pipe. The upper edge of the said compartment B, as well as the upper edge of the bottom section of the casing A, is provided with an extra rim D, concentrically arranged about the upper edges of each section, a slight space intervening between the said flange and the edge of the compartment, thus providing a socket into which the lower end of the superimposed section may be inserted in building up the kiln. The said lower section of the kiln B is provided with bracket-arms B², which are secured at one end to the inner walls of the said compartment B, the lower ends being free, and on these brackets are designed to rest the china-holding trays E, which are perforated, as shown in the drawings, and of somewhat smaller diameter than the diameter of the interior of the said compartment, so as to allow the heat to freely pass not only up through the apertures of the tray but about its circumference.

The second section of the outer casing is substantially of the same construction as the casing A, being provided with the extra arm at its top, and carries within the same a compartment J, which is similar to the compartment B, and carries on brackets a china-carrying tray. The said section J is mounted so as to leave a sufficient space about its outer circumference to allow heat to readily pass up from section to section, and superimposed upon the said central section of the compartment H is the top or cap piece, which carries a hood K, mounted on brackets secured to the inner walls of the outside casing and having a closed top from which leads a

pipe *k*, extending centrally through an aperture *M* in the cap or top section of the outer casing.

From the foregoing description and the
5 drawings forming a part of this specification it will be seen that my improved kiln comprises a series of compartments which may be built up, and any number of sections may be used when they are similarly constructed,
10 so that their ends will telescope in the manner described. By this provision of a kiln which may be built up it will be seen that it is my purpose to insert the sections of the kiln either through a door or cover of an ordinary heating-stove, after which the compartments may be assembled together and arranged ready to adapt the kiln for use, where-
15 by the walls of the stove will serve to retain the heat of radiation from the kiln, which
20 heat would otherwise be lost.

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

In a china-kiln, the combination with the outer sections having annular recessed rims 25 designed to receive a superimposed section, the cap-section having an aperture, *M*, of the inner series of superimposed sections, the brackets supporting same, the tube *k* secured to the upper of the inner sections *K* and 30 extending through the aperture *M*, of the lamp *C* supported under the lower of the inner sections, substantially as shown and described.

In testimony whereof I affix my signature 35 in presence of two witnesses.

GEORGE JEFFERY.

Witnesses:

L. SCHAD,

E. H. QUACKENBUSH.