

(No Model.)

2 Sheets—Sheet 1.

J. KENNEDY.
HOT BLAST STOVE.

No. 579,271.

Patented Mar. 23, 1897.

Fig. 1.

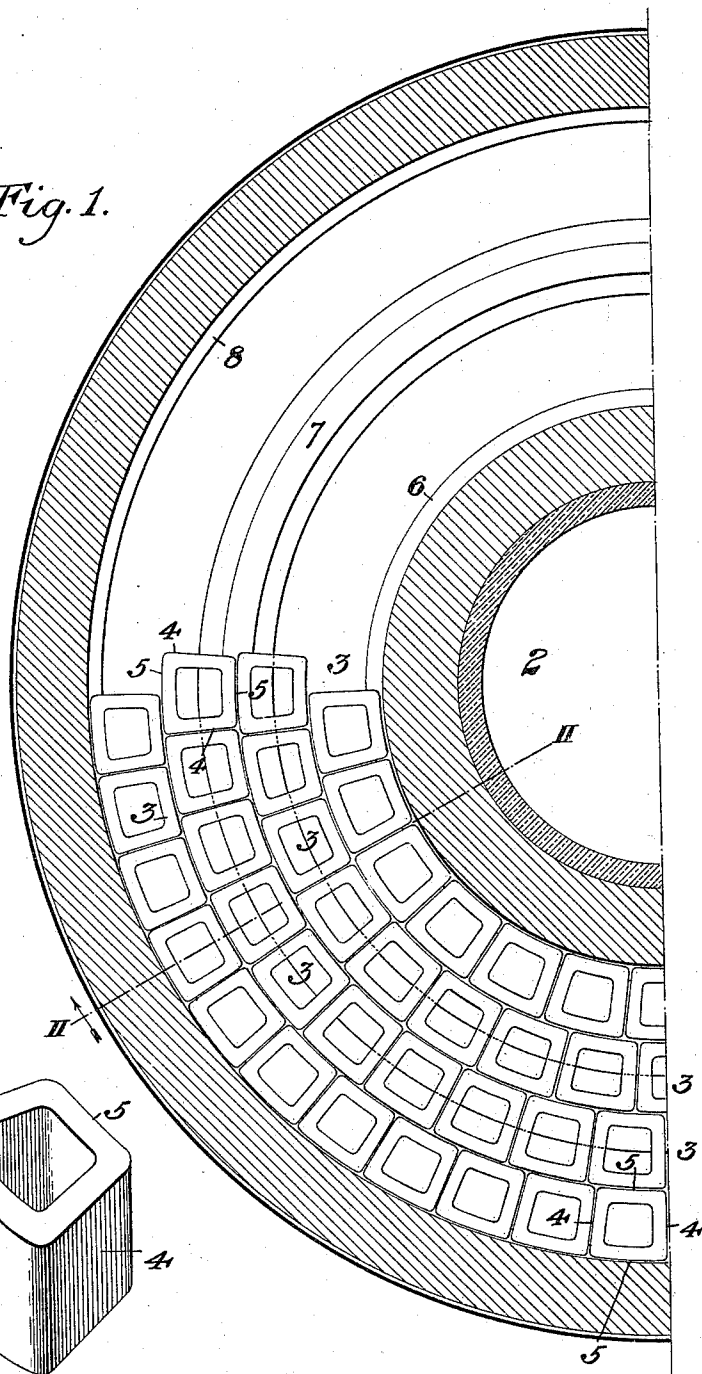
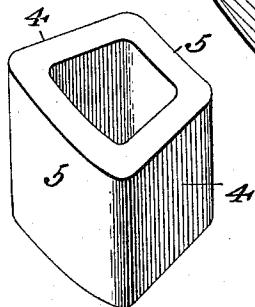


Fig. 2.



WITNESSES

J. A. Comer
J. J. Holdship

INVENTOR

Julian Kennedy
by his attorneys
Bakerwell & Bakerwell

(No Model.)

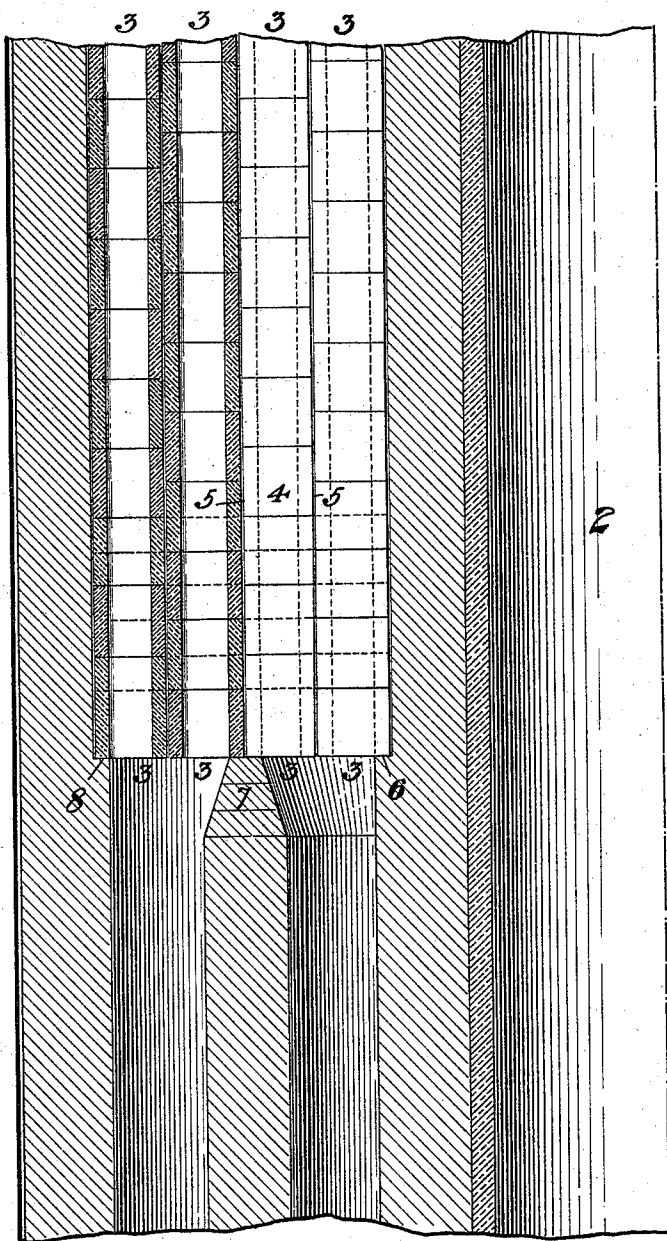
2 Sheets—Sheet 2.

J. KENNEDY.
HOT BLAST STOVE.

No. 579,271.

Patented Mar. 23, 1897.

Fig. 3.



WITNESSES

J. A. Comer
G. F. Stoddard

INVENTOR

Julian Kennedy
by his attorneys
Bakewell, Bakewell

UNITED STATES PATENT OFFICE.

JULIAN KENNEDY, OF PITTSBURG, PENNSYLVANIA.

HOT-BLAST STOVE.

SPECIFICATION forming part of Letters Patent No. 579,271, dated March 23, 1897.

Application filed July 25, 1895. Serial No. 557,089. (No model.)

To all whom it may concern:

Be it known that I, JULIAN KENNEDY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Hot-Blast Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a partial horizontal section of my improved "hot-blast" stove. Fig. 2 is a detail perspective view of one of the bricks employed therein; and Fig. 3 is a partial vertical section of the stove, showing the manner of the setting of the bricks.

My invention relates to hot-blast stoves, and is designed to afford a stove which shall give a greater amount of heating-surface for the same space occupied than former stoves and be easier and cheaper to build, as well as more durable.

To that end it consists in a stove having concentric series of bricks having radial sides, these bricks being hollow and having curved faces, so as to fit neatly and closely together.

It also consists in a construction and arrangement of the parts, as hereinafter more fully described, and set forth in the claims.

In the drawings, in which similar numerals indicate corresponding parts, 2 represents the combustion-chamber at the center of the stove and which forms one of the passes, the other pass being constituted of the flues formed by the concentric series of bricks 3, which are stacked one above the other in vertical columns between the wall of the combustion-chamber and the inclosing wall. Each of these bricks, as shown in Fig. 2, is hollow and is provided with radial sides 4 and curved front and rear faces 5. The curvature of each face of the bricks corresponds to the arc on the circle which is struck from the center of the stove, each brick being specially molded according to the particular series in which it is to be placed, the curvature growing less from the inner row outwardly. The bricks preferably break joint horizontally, as shown in Fig. 1, and they also break joint vertically, as shown in Fig. 3. By using these bricks the use of cross-tiles to support the bricks in the stove may be avoided, the inner series resting upon an annular ledge 6 around the combustion-chamber and abutting against the in-

ner faces of the next series, whose edges rest upon the annular wall or pier 7. The third series have their inner edges resting upon the pier and in turn press against the inner faces of the outer series, whose outer edges rest upon an annular ledge 8 in the inclosing wall. The upper bricks of each vertical column rest upon the lowermost bricks, and as the several columns are built up they tend to strengthen and support each other.

The advantages of my invention will be apparent to those skilled in the art, since there are no waste spaces in the stove, every available part of which is utilized for heating-surface.

The construction is exceedingly simple and compact and the use of cross supporting-tiles is rendered unnecessary, the lowermost bricks of each series resting directly upon portions of the annular walls, these walls being either the inclosing walls of the stove or such inclosing walls together with annular walls of less height built within said inclosing walls.

The curvature of the faces may vary somewhat or they may be straight and the sides may be varied slightly from true radial lines. As many series of bricks may be used as desired, and the arrangement may be used in stoves with any desired number of passes. Many other variations in the form and arrangement of the parts will readily suggest themselves to those skilled in the art without departing from my invention, since

I claim—

1. A hot-blast stove having concentric vertical series of hollow bricks, said bricks having substantially radial sides, substantially as described.

2. A hot-blast stove having an annular vertical series of hollow bricks, said bricks having substantially radial sides and curved faces; substantially as described.

3. A hot-blast stove having concentric vertical series of hollow bricks, said bricks having radial sides and breaking joint horizontally; substantially as described.

4. A hot-blast stove having concentric vertical series of hollow bricks, said bricks having radial sides and breaking joint vertically; substantially as described.

5. A hot-blast stove having concentric series of hollow bricks, the lowermost bricks of

each series resting directly and entirely upon the annular vertical walls of the structure, substantially as described.

6. A hot-blast stove having concentric series of hollow bricks, the faces of one series abutting against the faces of the next series, the lowermost bricks of each series resting directly upon ledges formed in the inner and

outer walls and upon the annular pier between said walls; substantially as described. 10

In testimony whereof I have hereunto set my hand.

JULIAN KENNEDY.

Witnesses:

C. BYRNES,

G. I. HOLDSHIP.