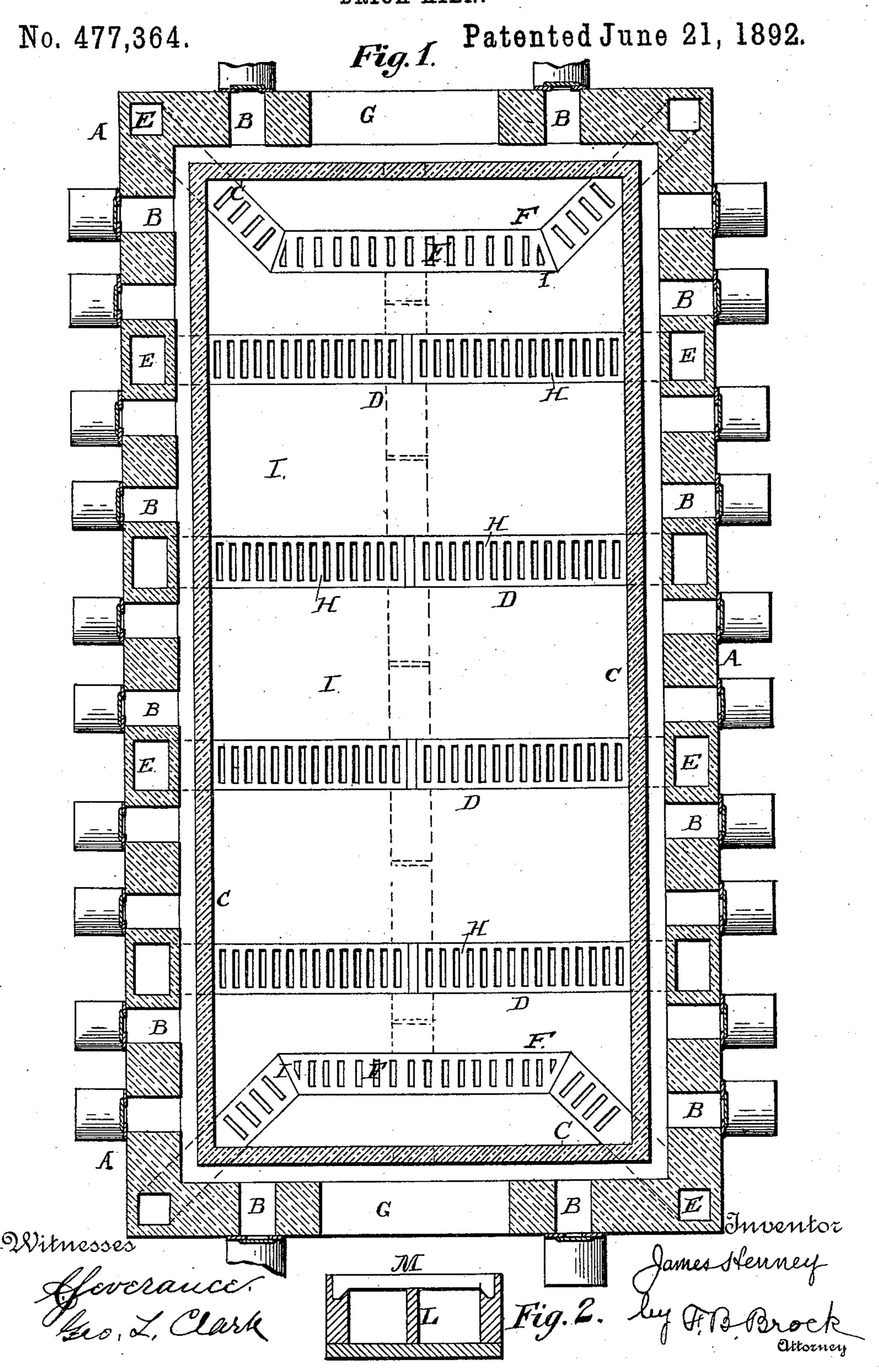
J. HENNEY. BRICK KILN.



United States Patent Office.

JAMES HENNEY, OF CLOVERPORT, KENTUCKY.

BRICK-KILN

Doll local forming part of Letters Patent No. 477,364, dated June 21, 1892.

Application filed February 27, 1892. Serial No. 423,063. (No model.)

To all whom it may concern:

Be it known that I, JAMES HENNEY, a citizen of the United States, residing at Cloverport, in the county of Breckinridge and State of 5 Kentucky, have invented certain new and useful Improvements in Brick-Kilns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it 10 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.

The improvements relate to kilns for brick; 15 but they may be extended in their application to kilns for burning clay and pottery of any form or style for which by suitable modifications my invention may be found

applicable. My invention consists in the following construction and combination of kiln, which will be first fully described, and the features of novelty then pointed out and claimed.

Figure 1 shows a sectional ground plan of 25 a kiln embodying my invention. Fig. 2 is a detail sectional view.

A represents the outer wall of the kiln.

B shows a number of furnaces in the side and end walls of the kiln. These furnaces 30 may be of any size or form suitable for one or more kinds of fuel desired to be burned.

C represents the flash-walls extending around the inner sides of the outer walls, leaving an encompassing flue-passage be-35 tween the walls A and C common to each of the furnaces B, into which they all communicate.

D represents a series of flues extending across the kiln from side to side and are con-40 nected at either end with the chimneys E.

F are two flues in the bottom of the kiln at each end thereof. The intermediate portion of this flue is transverse of the kiln, from whence its opposite ends run diago-45 nally into the corner chimneys E in the four corners of the kiln.

G are the doors in the opposite ends of the kiln.

dimensions and may be arranged at any dis- 50 tance apart, according to the work required or dimensions of the kiln.

H represents gratings over the tops of the flues D and F. The gratings may be of any suitable pattern. The whole floor I of the 55 kiln may have gratings or grids, if desired, both the floor and the tops of the flues being preferably on a common level. The fire from all the furnaces passes into the surrounding passage behind the flash-walls, which extend 60 up to near the height of kiln. The products of combustion then strike the arched ceilingwall of the kiln and are deflected inwardly over the brick in the kiln. The heat then passes downwardly through the bricks and 65 enters the flues D and F, from whence it passes to the chimneys E and out into the outer air. The chimneys are formed in the wall A between the furnaces B. The usual dampers are put in the chimneys to regulate 70 the draft and the usual openings made on the side or top of the arch.

My kiln is a great improvement over all others. It will burn all kinds of clay to a uniform color from end to end and from top 75 to bottom. My kiln is also very economical with fuel and accomplishes its work in the shortest practicable time, the draft being very free and good.

By the employment of the peculiar-shaped 80 diagonal flues F, in connection with the transverse flues, I am enabled to secure a much more perfect and uniform distribution of the heat within the kiln than in ordinary kilns and a much more complete combustion 85 and draft.

L represents an intermediate longitudinal partition which I place in the flues D and F to support the grid blocks or bars, which are of the shape shown, having widened ends, 90 which rest upon the opposite walls of the flue.

I claim— A brick-kiln of the character described, consisting of an outer wall within which is arranged a series of furnaces in the sides 95 and ends, a series of chimneys interposed between the furnaces, a series of intermediate The flues D and F may be of any desired I transverse flues connected at their opposite

ends with the chimneys, flues at the end of the kiln, each having an intermediate transverse portion and opposite diagonal extensions connecting with the corner chimneys of the kiln, and a flash-wall extending around the interior sides of the kiln, between which wall and kiln the furnaces communicate.

In testimony whereof Iaffix my signature in presence of two witnesses.

JAMES HENNEY.

Witnesses:
GEO. C. PATTON,
P. FISHER, Jr.