

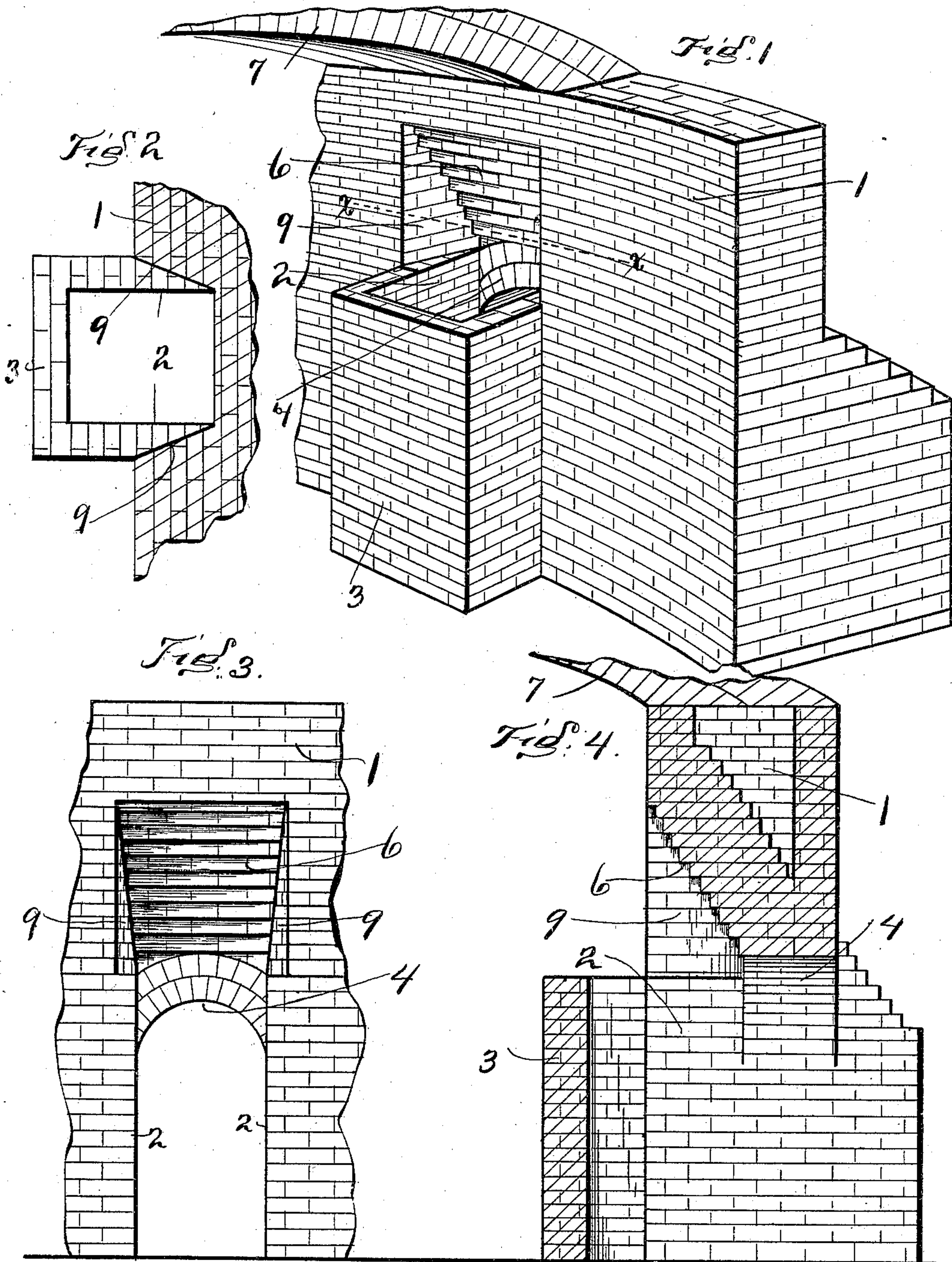
No. 662,633.

Patented Nov. 27, 1900.

L. VINEZ.
KILN FURNACE.

(Application filed July 10, 1900.)

(No Model.)



Witnesses,
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Att'y.

UNITED STATES PATENT OFFICE.

LOUIS VINEZ, OF LOUISVILLE, OHIO.

KILN-FURNACE.

SPECIFICATION forming part of Letters Patent No. 662,633, dated November 27, 1900.

Application filed July 10, 1900. Serial No. 23,094. (No model.)

To all whom it may concern:

Be it known that I, LOUIS VINEZ, a citizen of the United States, residing at Louisville, in the county of Stark and State of Ohio, have
5 invented certain new and useful Improvements in Kiln-Furnaces; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being
10 had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a view showing a portion of a kiln and illustrating the arrangement of the inner portion of the furnace proper. Fig. 2
15 is a transverse section through line $x x$, Fig. 1, showing the arrangement of the side walls, also a top view of the pocket-wall. Fig. 3 is a side elevation showing the inner side of the furnace and a portion of the kiln-wall. Fig.
20 4 is a vertical section of the kiln-wall through the furnace.

The present invention has relation to kiln-furnaces; and it consists in the novel arrangement hereinafter described.

25 The object of the present invention is to so arch the furnace that the brick used in the construction of the arch will be removed from the intense heat and at the same time so arranged that they will support the kiln-wall
30 proper.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

35 In the accompanying drawings, 1 represents the kiln-wall, which is constructed in the ordinary manner, reference being had to my improved construction of the furnace and the wall relating thereto.

40 In the accompanying drawings I have illustrated a portion of the furnace-wall, also a portion of the crown, and have illustrated said parts designed for a circular kiln; but it will be understood that no peculiar construction of the kiln-wall proper is required
45 to carry out the object and purpose of the present invention.

50 The sides of the furnace-opening are located as shown, said sides consisting of the straight-faced walls 2, which extend upward to a point at the top of the pocket-wall 3.

Directly opposite the furnace, upon the inside of the kiln-wall, is located the pocket-

wall 3, which in this instance is shown angular; but it will be understood that the pocket-wall may be differently constructed without
55 departing from the nature of my invention.

The arch 4 is constructed in the outer portion of the kiln-wall, as illustrated in the drawings, and from the top of the arch between the jamb-walls is continued the inner
60 portion of the kiln-wall, which consists of the inclined structure 6, said inclined structure being drawn toward the kiln-chamber and is so constructed for the purpose of causing the
65 heat arising from the furnace to be shunted upward and toward the vertical center of the kiln or, in other words, toward the opposite wall of the kiln.

It will be understood that by my peculiar arrangement no arch is needed or required
70 for the inner portion of the kiln-wall, but the straight inclined wall 6 takes the place of the ordinary arch, thereby setting the arch proper away from the intense heat and at the same
75 time allowing a free and unobstructed passage for the heat upward, from whence it is shunted downward by the crown 7.

For the purpose of better bracing the kiln-wall proper and at the same time allowing
80 the flame and heat to be better distributed throughout the kiln the jamb-walls 9 are flared, as illustrated in the drawings, or, in other words, the walls are tapered toward each other as they approach the inclined wall or
85 back 6.

It will be understood that by providing the increased exit above the pocket-walls 3 at
90 their sides and just above said pocket-walls a better distribution of the heat will be brought about and at the same time the kiln-wall proper will be better braced.

It will be understood that the angularity of the flare given to the jamb-walls 9 may be
95 varied without departing from the nature of my invention, inasmuch as the flare or taper may be varied, reference being had to the size and shape of the kilns designed to be constructed.

Having fully described my invention, what I claim as new, and desire to secure by Letters
100 Patent, is—

The combination of a kiln-wall provided with an arch, said arch located only in the outer portion of the kiln-wall, an inclined back

5 wall located directly over the arch and extended upward and inward in an inclined direction from the arch, jamb-walls located upon either side of the inclined back, said jamb-walls diverging from the inclined back, parallel walls and a pocket-wall located below the inclined back, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LOUIS VINEZ.

Witnesses:

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