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C. E. FULLER

METHOD OF BURNING BRICK

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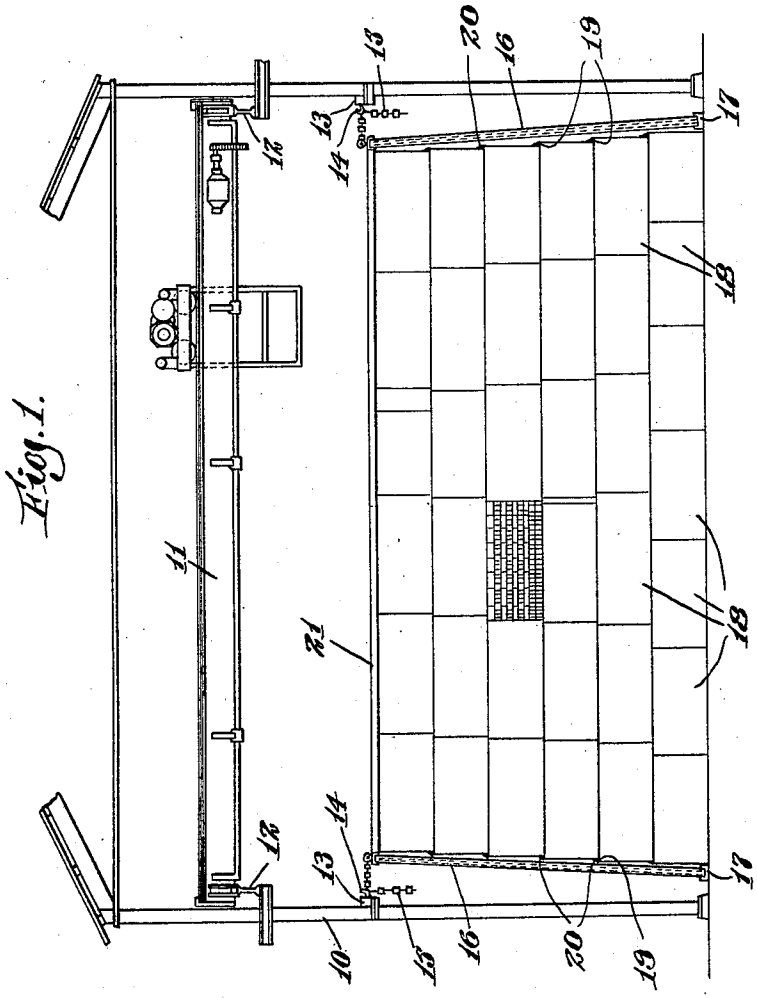


Fig. 1.

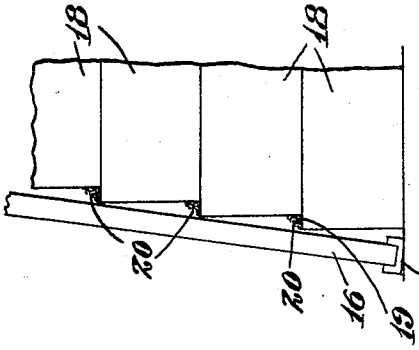


Fig. 2.

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CLAUD E. FULLER, OF NEW YORK, N. Y., ASSIGNOR TO NEW YORK BRICK HANDLING CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

METHOD OF BURNING BRICK.

Application filed February 28, 1927. Serial No. 171,453.

My present invention relates to the manufacture of brick, and more particularly to an improved method of manufacturing and burning soft mud brick.

In the manufacture of brick, and particularly in the burning of soft mud brick, it is customary to build the outside tiers of brick and the top courses of brick in a kiln out of a mud, to which has been added double the amount of coal dust necessary to be added to the interior portions or tiers of the kiln. This coal dust ignites at a certain temperature and helps burn the brick. In building up the kiln, the regular brick are used and then a tier of double coal brick, as they are called, are placed around the kiln and over the top. The scoving is then applied in the regular way and this double amount of coal in the double tiers or layers materially helps to burn these outside brick. The adding of this additional coal is rather an expensive operation, particularly, since, whenever any of these double coal brick are placed by mistake in the inside of the kiln, they "swell" or "lamie," and are destroyed, and in spite of all precautions, this happens quite frequently.

In my present invention, I obviate the difficulties above enumerated, and am enabled to dispense entirely with the use of double coal brick. The result is that but one kind of brick have to be manufactured, and in order to thoroughly burn the outside tiers of brick in the kiln, I utilize material placed on the ledges of each unit of brick as they are set down, which material becomes ignited as the heat of the burn increases and in this way a uniform brick is obtained.

The object of my invention, therefore, is an improved method of burning brick.

In the accompanying drawings illustrating a kiln constructed so as to carry out my invention,

Fig. 1 is an end view of a kiln, and

Fig. 2 is an enlarged sectional elevation of a portion of a kiln.

In the accompanying drawings, 10 designates a kiln shed provided with the usual and ordinary traveling crane 11 running on rails 12 extending longitudinally of the kiln and attached to the side walls thereof. Attached also to the side walls and below the rails 12 are members 13, to which are attached hooks 14 serving as holding members for chains 15 attached to the top of portable scoving 16, such portable scoving fitting in the removable trough 17 on the floor of the kiln. 18 designates units of brick constructed in the usual manner and with the usual amount of coal dust therein. The lower course rests on the floor of the kiln and it will be noted that the second course of units 18 are offset or inset from the lower course as clearly shown in Fig. 2, leaving a ledge of relatively substantial width 19, on which I place or pile coal dust 20. Each succeeding course of units of brick 18 are arranged likewise, the ledge formed by the insetting of the succeeding course being filled with coal dust 20, as above described. After the kiln is built and as illustrated in Fig. 1, a platting 21 is utilized to cover the top of the kiln, this platting being the ordinary platting or a portable platting such as shown and described in my copending application Serial No. 171,599, filed February 28, 1927. The kiln having been fired in the usual way, the burn is started and the interior units of brick 18 are entirely burned first. As the heat of the burn increases, the heaps of coal dust 20 on the ledges 19 become ignited and aid and assist in the burning of the outside layers or tiers of brick. The coal dust 20 may be pure coal dust or may be coal dust mixed of any desired portion of slag, sand or other refractory material, and I find that under certain circumstances, this is desirable as it retards the time of igniting the coal dust 20 and also retards the burning thereof, rendering the resulting brick more uniform in character.

By properly proportioning the amount of coal 20 to the size of the kiln, which may be readily done by increasing or decreasing the width of the ledges 19 and by diluting the coal dust 20 with an adulterant as sand or the like, I am able to improve any condition of burning in the kiln that may be required.

Having thus described my invention, what I claim as new is:

The improved method of burning brick which consists in arranging the courses of brick in tiers, insetting said tiers of brick as the number of courses is increased to form a ledge at each tier or course, placing combustible material on the ledges thus formed, enclosing the kiln with scoving, whereby, as the heat of the burn increases, the layers of combustible material will be ignited and the outer tiers or courses of brick in the kiln uniformly burned.

In testimony whereof, I have signed my name to this specification.

CLAUD E. FULLER.