

UNITED STATES PATENT OFFICE.

AUGUSTUS MAGOON, OF LOGAN, OHIO, ASSIGNOR OF ONE-HALF TO JOHN W. JONES,
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METHOD OF TREATING BRICK.

No. 873,568.

Specification of Letters Patent.

Patented Dec. 10, 1907.

Application filed November 15, 1906. Serial No. 343,599.

To all whom it may concern:

Be it known that I, AUGUSTUS MAGOON, a citizen of the United States, residing at Logan, in the county of Hocking and State of Ohio, have invented new and useful Improvements in Methods of Treating Bricks, of which the following is a specification.

This invention relates to a method of treating bricks. This title is adopted simply for convenience for the method may be employed with advantage in the production of goods or ware other than such articles known specifically as bricks. In other words, when I use the latter designation in the title of my invention I do so in a broad sense.

The method is adapted particularly for action upon bricks which have iron in the clay from which the same are composed and which metal frequently makes the article of dark color and usually of a variable shade. By virtue of my method these disadvantages are eliminated so that I am enabled to secure a brick of uniform light or mottled clear color.

Broadly stated the invention comprehends the introduction of air into a kiln. This air is preferably introduced into the kiln in a large volume and its place of admission will depend upon the type of kiln whether the same be down draft, up draft, or up and down draft. With a down draft kiln the air is preferably admitted therinto at the top or crown and is directed downward under pressure by suitable mechanical means, such as a fan. With an up draft kiln the air is let into the same at the bottom, and with an up and down draft kiln the air is passed into the kiln between the top and bottom thereof. Therefore, it will be apparent that I do not limit myself to the practice of the process in connection with any particular type of kiln. I find that the air which is thus admitted to the kiln oxidizes and changes to some extent the coloring matter in the brick. It is not material at what temperature the air is, although I find I cannot secure advantageous results by having the air cold, by which I mean colder than the normal. The blowing in of the air

preferably occurs at the high heat stage and continues for approximately a period of three hours. This period of time may, however, be varied and is mentioned simply as an illustration.

To enable those skilled in the art to practice the invention and only for this purpose I will point out one particular procedure involving my method. From what has been stated it will be obvious that I am not limited to this particular mode of carrying the invention into effect, for the invention is more general in its character.

An ordinary down draft kiln twenty-eight feet inside diameter will hold about thirty thousand fine face brick. A kiln of this type and capacity would require about twenty-four thousand cubic feet of air a minute blown into it. This is substantially equivalent to eight hundred cubic feet a minute for one thousand standard size brick. For blowing in the air, I find that an ordinary one hundred inch fan driven three hundred and thirty-six revolutions a minute will deliver the necessary amount of air. The supply of the air to the interior of the kiln commences at about the time when the kiln has developed its maximum temperature and may continue for the period stated.

What I claim is:

1. The method of treating colored brick which consists in introducing a large volume of air into the kiln containing said brick when the kiln is at its maximum temperature to oxidize the coloring matter in the brick.

2. The method of treating colored brick which consists in introducing a large volume of air under pressure into the kiln containing said brick when the kiln is at a high heat and continuing such supply of air to oxidize the coloring matter in the brick.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

AUGUSTUS MAGOON.

Witnesses:

JNO. A. SMITH,
E. PLEUKHART.