United States Patent Office.

HENRY MAURER, OF NEW YORK, N. Y.

PROCESS OF MANUFACTURING POROUS BRICKS.

SPECIFICATION forming part of Letters Patent No. 520,266, dated May 22, 1894.

Application filed August 23, 1890. Serial No. 362,892. (Specimens.)

To all whom it may concern:

Be it known that I, Henry Maurer, a citizen of the United States, and a resident of New York city, in the county and State of New York, have invented new and useful Improvements in Porous Bricks, of which the following is a specification.

The object of my invention is to produce a new and improved porous brick, and it consists in an improved method or process of

making such a brick.

My improved brick is made as follows: To a quantity of clay, a quantity of dung is added. These two substances are then mixed together, in an ordinary mill such as is used by brickmakers, or in any other suitable way. The mixture is then pressed or molded into bricks or blocks of any desired shape, and these bricks or blocks are then burned in any manner and by any means suitable to the manufacture of porous bricks, the dung being consumed during the burning of the brick.

The dung that I use is that of animals that eat straw, hay, grain or similar vegetable fibrous substances; the clay may be of any kind used in making bricks, and may be sandy or free from sand.

The mixing, molding, and burning of my 30 materials may be accomplished in the well known ways and by the usual devices em-

ployed in making porous bricks.

are made.

The relative proportions of clay and dung used can vary with the kind or quality of 35 brick desired; thus increasing the proportion of dung used to that of clay, softens the brick and decreasing its relative proportion as compared with clay hardens it. If a soft brick is required more dung should be used 40 or less clay proportionally while if a harder brick is required, the proportion of clay should be increased or that of dung decreased. I do not confine myself to any relative proportions of these materials so long as 45 a substantial quantity of dung is used. I find that using equal parts of each makes an excellent hard brick, while five parts of dung to three of clay make a good soft brick. Good bricks can however be made either 50 harder or softer than those described above, according to the purpose or use for which they

My improved brick possesses great advantages over ordinary bricks and over those made from saw-dust or from straw. It is 55 stronger than the latter; nails and screws can be more readily driven into it; even in the harder bricks wire or other small nails, as well as large ones, can be driven in with great ease; they can in fact be driven in more read- 60 ily than into many kinds of wood. It has a denser and firmer texture and nails and screws hold much more firmly in it. My improved brick possesses such strength that it can be used for all purposes for which ordinary bricks 65 are used, although especially adapted for fireproofing and interior use and in places where nails and screws are needed.

The effect of mastication and digestion upon the vegetable fibers seems to be to comminute those fibers and otherwise prepare them in an especially thorough and suitable manner for forming, when mixed with clay and treated as described, the required porous brick.

The pores in my brick are not as large as those made from sawdust or straw.

Not only is there a difference between the material used in my process, to wit, dung, and the materials heretofore used, such as saw- 80 dust, in respect to the comminution referred to but the character of the material itself as regards chemical composition is also different. As a result of this latter difference the action of the dung in rendering the brick porous is 85 different both in its nature and effectiveness from that of sawdust.

My improved brick is also much cheaper and moreover its manufacture furnishes a means of disposing of an article that is nox- 90 ious and offensive and often a nuisance. It can be made either hollow or solid or in any shape in which ordinary or porous bricks are made.

I do not herein claim the improved composition used in the above process, as I have reserved that claim for a separate application, filed November 14, 1890, the serial number of which is 371,408.

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

1. An improved process of manufacturing porous bricks, which consists in mixing clay

with a substantial quantity of dung and then molding and burning the mixture, substantially as described.

2. An improved process of manufacturing porous bricks, which consists in mixing clay with a substantial quantity of the dung of animals that eat hay, straw, grain or similar

vegetable fibrous substances, and then molding and burning the mixture, substantially as described.

HENRY MAURER.

Witnesses:

HERBERT H. GIBBS, WILLIAM G. WEINBERG.