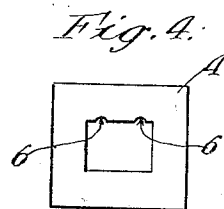
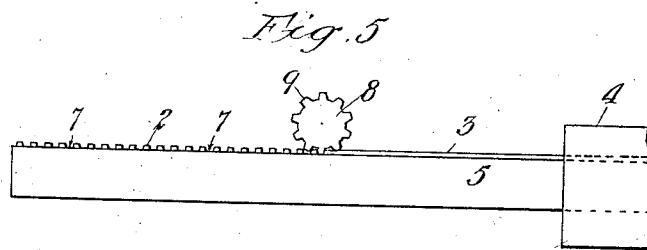
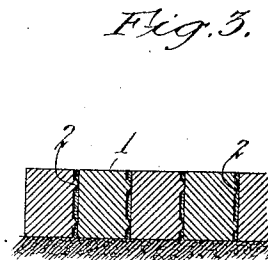
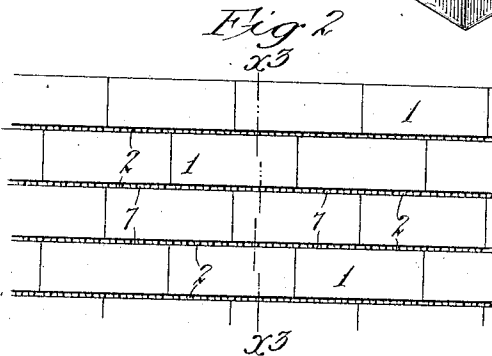
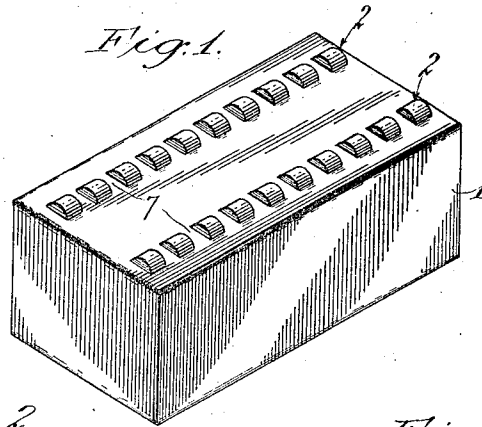


C. H. FROST.
METHOD OF MAKING BRICK.
APPLICATION FILED JAN. 27, 1908.

1,014,964.

Patented Jan. 16, 1912.



Witnesses:
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Frank L. A. Graham.

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UNITED STATES PATENT OFFICE.

CHARLES H. FROST, OF PASADENA, CALIFORNIA.

METHOD OF MAKING BRICK.

1,014,964.

Specification of Letters Patent.

Patented Jan. 16, 1912.

Application filed January 27, 1908. Serial No. 412,949.

To all whom it may concern:

Be it known that I, CHARLES H. FROST, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented a new and useful Method of Making Brick, of which the following is a specification.

This invention relates to a method of producing a brick designed especially for paving, and the objects of the invention are to provide a brick which may be constructed with projections of appreciable height on its face, which projections prevent the bricks, when laid, from lying close to each other and allow the cement, grout or other binding material to enter freely into the spaces formed between the bricks by the projections, which projections will become interlocked with the cement and thus most securely anchor the bricks.

Attempts heretofore have been made to produce projections comprising slightly raised letters on pressed brick by repressing the body of the brick, except at points where lettering is to appear, but it is impossible to repress a pressed brick to an extent sufficient to produce projections of any appreciable height. The best results secured have only produced such slightly raised projections that they do not form cracks between the bricks which will permit the cement to enter and flow to the bottom, and it has only been possible with such construction to get the cement a very short way down from the top.

The present invention consists of a method of producing a pressed brick which is provided with projections of an appreciable height, which projections form stable abutments for the adjoining brick to lie against and produce a crack of the desired thickness between two bricks, and the method, in fact, enables the projections to be formed of any desired height, and, so far as I am aware, no pressed method of producing a brick provided with such projections of appreciable height, has heretofore been known.

It should be borne in mind that the height of the projections is a necessary feature to enable the cement to work down to the bottom and fully fill the cracks between the bricks and cause the desired interlocking effect.

The accompanying drawings show my novel form of brick and illustrate the

method of producing same, and referring thereto:—Figure 1 is a perspective view of the brick. Fig. 2 is a plan view of a portion of pavement constructed with the brick. Fig. 3 is a sectional view on line x^2-x^3 of Fig. 2. Fig. 4 is a face view of the die of one form of press from which the bar issues and which produces the desired cross sectional contour of the brick. Fig. 5 is a side elevation of the bar issuing from such a press, and illustrates one device for indenting the ribs on the side or face of the brick to produce the recesses in the ribs.

The brick consists of a body 1, having a plurality of projections 2 upon one or both of its sides, or faces. These projections are preferably arranged in rows or series which extend from end to end of the brick but are at a distance from its edges. They can be arranged opposite each other in the different rows or so as to alternate with each other, as will be readily understood, but I have only shown two rows of projections in the drawings with the projections in alignment with each other or transversely of the brick. The projections may also be of any suitable size and shape but they are preferably made of an appreciable height, and semi-cylindrical in cross section, that is, with a curved exterior, or outer wall, and with straight, parallel end walls. By appreciable height I means that when the bricks are placed upon their edges, as side by side to form a pavement, they will be held at such a distance from each other by the projections of one brick engaging with the side of an adjacent brick, a crack or space will be formed between said bricks to permit of the cement, grout, pitch &c., that is poured between them flowing or passing to the bottom of the bricks and thereby making a substantially solid structure without cracks or cavities in which water can find a lodgment to detract from or destroy the efficiency and solidity of the mass.

I am aware that efforts have been made to form projections upon bricks by repressing the brick so as to form letters, as the name of the maker, thereon, but, owing to the substantially incompressible nature of a pressed brick, the letters while sufficiently readable are of such a slight height as to be substantially inappreciable so far as any mechanical function is concerned. Furthermore, the spaces formed by the irregular shapes of the letters rendered many of them inacces-

sible to the cement, or filler, and thereby detracts from the efficiency of such construction, and, therefore, I do not claim the same.

In forming my brick the projections 2 are first formed as a rib 3 by the forming die 4 when the brick, or pressed material issues therefrom in the form of a bar 5, the die being provided with rib forming recesses 6. In this manner the bar receives its final pressure within the die, as also do the portions of the ribs that form the projections, thereby securing homogeneity of structure and uniformity of pressure in the brick and projections.

The portions of the ribs between the projections are then indented or pressed down into the body of the brick to form recesses, or spaces 7, in any suitable manner, preferably by means of a rotating wheel 8 provided with ribs or projections 9. In this manner the recesses, or spaces, can be rapidly formed in the ribs as soon as the bar comes from the press and before it has been permitted to dry, or become hardened in the least, by exposure to the air, thus permitting

of the small amount of material between the projections to be easily forced down into the body of the bar without materially changing or affecting the density or texture of the bar.

Having described my invention, I claim:—

1. The herein described method of producing a brick, which consists in forming a body portion with one or more ribs on its face and then forming recesses in said ribs by indenting said ribs.

2. The herein described method of producing a brick, which consists in forming a body portion with ribs projecting an appreciable distance from its face and then compressing portions of the ribs to form recesses therein without further appreciably compressing said body portion.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 18th day of January, 1908.

CHARLES H. FROST.

In presence of—

GEORGE T. HACKLEY,

FRANK L. A. GRAHAM.