

(No Model.)

J. C. ANDERSON.

METHOD OF MANUFACTURING ORNAMENTAL BRICKS.

No. 406,687.

Patented July 9, 1889.

Fig. 1.

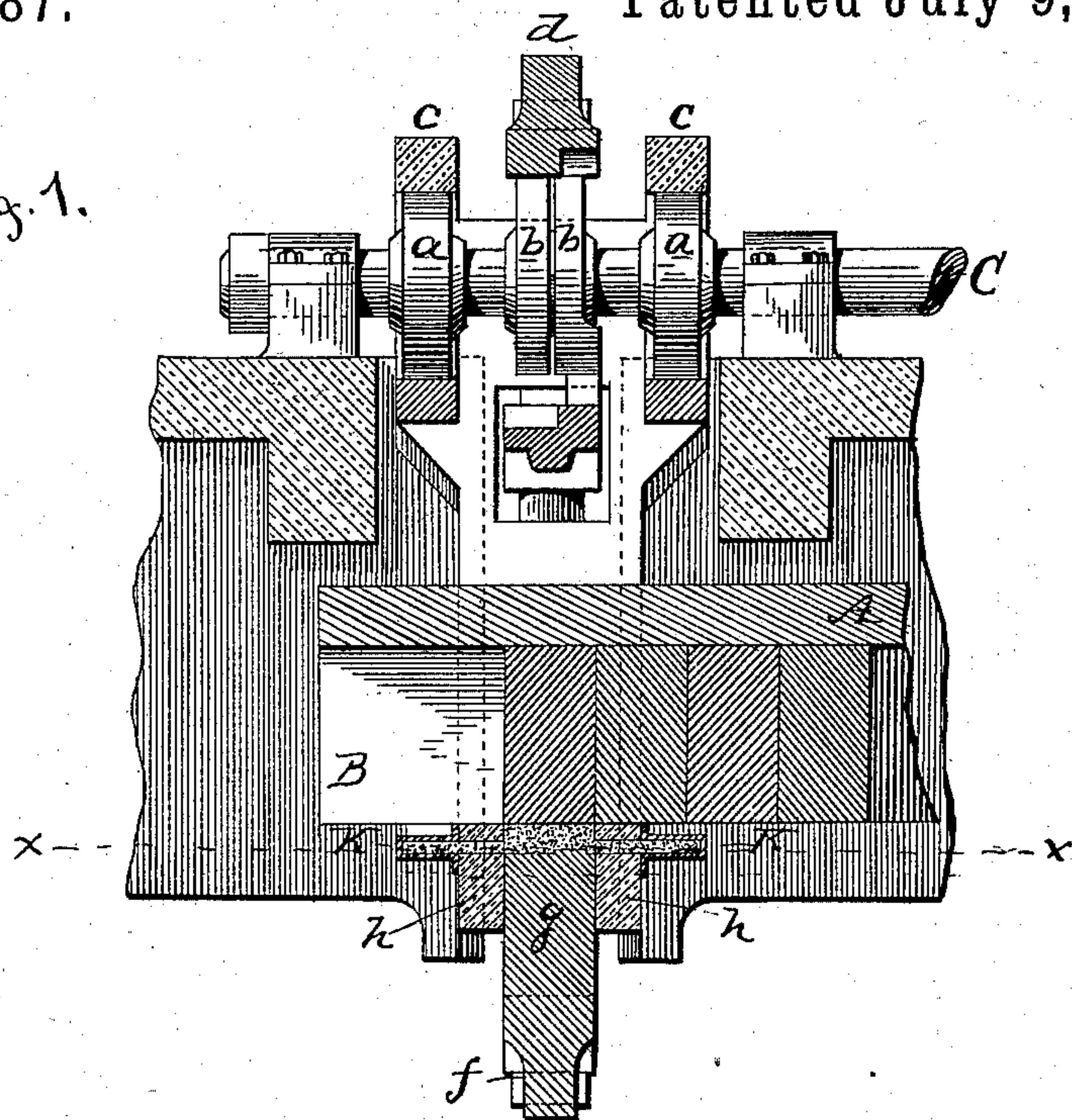


Fig. 2.

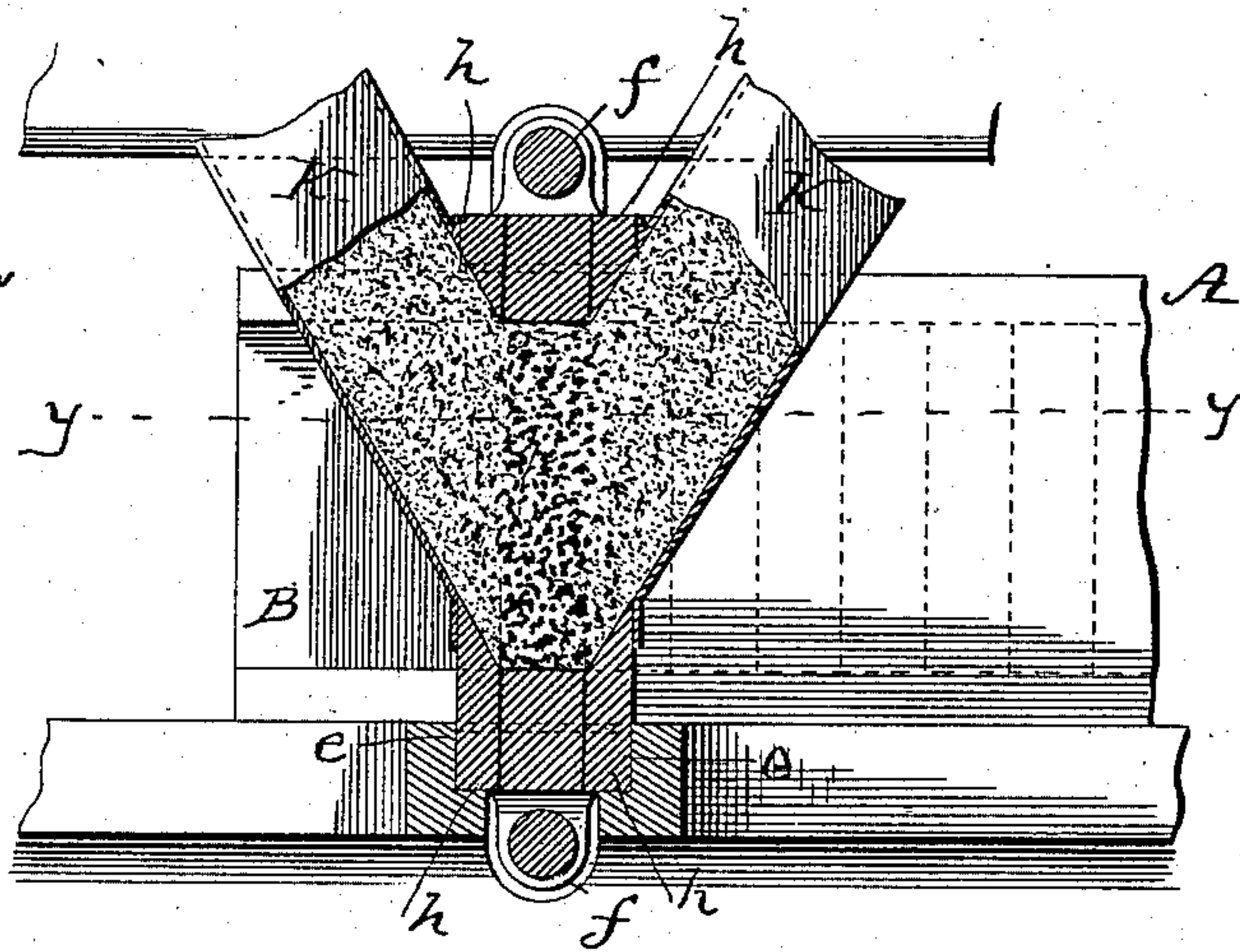
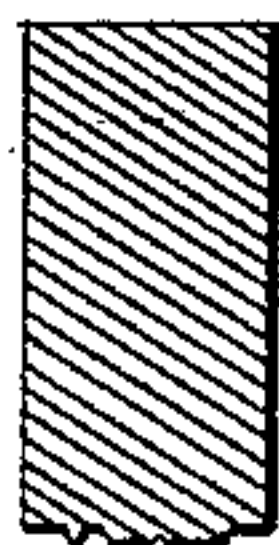


Fig. 3.



WITNESSES

F. L. Ourand
Alex Mahon

INVENTOR

J. C. Anderson
By
J. H. Griswold
Attorney

UNITED STATES PATENT OFFICE.

JAMES C. ANDERSON, OF HIGHLAND PARK, ILLINOIS.

METHOD OF MANUFACTURING ORNAMENTAL BRICKS.

SPECIFICATION forming part of Letters Patent No. 406,687, dated July 9, 1889.

Application filed June 6, 1888. Serial No. 276,186. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. ANDERSON, a citizen of the United States of America, residing at Highland Park, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in the Method of Manufacturing Ornamental Bricks, of which the following is a specification, reference being had therein to the accompanying drawings.

My present invention relates to a method of forming ornamental facings on brick for the walls of buildings, the object of which is to decorate the same with leaves, vines, flowers, and fruit, such decorations being represented in their natural colors, in relief or in depression, driven into the face or surface of the brick and made integral with the main body of the same.

My invention consists, therefore, in pressing a brick from dry clay powder, and while the same is in green or unburned condition to press on and into the face edge of said brick fine clay powder of a different color or colors from the main body of the brick in the shape of ornaments—such as vines, stems, flowers, and fruit, representing their natural colors—producing the contour of the bodies in relief and in depression.

In carrying out my invention the clay used for the main body of the brick is reduced to a fine dry powder and pressed into form by any suitable mechanism. The clay from which the ornamental facing is made is also reduced to a fine dry powdered condition and mixed with metallic oxides, which produce the natural colors of the fruits, flowers, vines, and leaves, (when burned,) and is pressed on and into the main body of the brick by any suitable mechanism.

In the accompanying drawings I have shown mechanism by which my invention is carried into effect, and in an application filed of even date herewith, Serial No. 276,187, I have shown, described, and claimed such mechanism; but I do not wish to limit myself to any particular devices, as many such devices may be organized to produce the same effect.

Referring to the drawings, Figure 1 is a horizontal sectional view of the devices for pressing onto the brick an ornamental facing

of clay and the mold in which the brick are formed, taken on the line *y y* of Fig. 2. Fig. 2 is a sectional side view taken on line *x x* of Fig. 1. Fig. 3 is a side and sectional view of a brick having the ornament pressed thereon.

A is an elongated mold-box in which the main body of the brick is formed from dry clay powder, the mechanism for feeding the clay into the mold and for pressing the brick into form in this part of the operations being the subject-matter of a separate application filed by me April 19, 1888, Serial No. 271,192. One side of the rear end of the mold-box is open, as shown at B, said portion being open, so as to expose one edge of the newly-formed brick, so that the clay forming the ornamental portion can be pressed thereon by the devices which will now be described.

C is a shaft mounted in suitable supports on the frame of the machine and parallel with the side of the mold-box, said shaft being provided with suitable gearing to drive it from the main shaft of the machine. The shaft C is provided with a series of cams *a* and *b*, which work in yokes *c* and *d*. The yokes *c* and *d* form a portion of the frames *e* and *f*, which are mounted in suitable guides above and below the mold-chamber and extend transversely across said mold-chamber, said frames being moved back and forth by means of the cams *a* and *b*, working in the yokes *c* and *d*. The outer end of the frame *f* is provided with a plunger *g*, the face of which is provided with raised and depressed portions of any desirable design or configuration, which press in and onto the face edge of the brick the clay forming the ornamental portion. The frames *e* and *f* are operated simultaneously and independently of each other by the cams *a* and *b* in the yokes *c* and *d*, the plate *h* constituting the outer end of the frame *e*, and serving to close the side of the mold-box on each side of the plunger *g* when the same is exerting its pressure on the edge of the brick.

K are feed-spouts, which connect with the feed-supply hopper at their upper ends, the lower ends of said spouts being made thin and as wide as the length of the brick. The feed-spouts pass through the plates *h*, as shown in Figs. 1 and 2, so that the requisite

amount of clay to form the ornamental portion will be deposited in front of the plunger *g*.

It will be understood that the bricks are formed in the front end of the mold-box one 5 after another, and are pushed through the mold-box toward the rear end, and when they reach the opening B in the side of the mold-box they are in position to have the ornamental portion pressed on and into the edge 10 of the brick. The cams *a* are so timed in their movements that the frame *e* and the plate *h* will move slightly back before the frame carrying the plunger *g* does, so that the supply of clay will be cut off by said plunger. 15 The frame *e* and the plunger *g* then move back to allow the brick having the newly-formed ornament thereon to be pushed forward without injury to the same and another brick brought into position to be ornamented, 20 after which the frame *e* moves forward and allows the clay powder to fill in between the face of the plunger *g* and the face of the brick to be ornamented. Then the plunger *g* is brought forward to exert the required 25 pressure and fix the clay powder in the form of stems, vines, fruits, and flowers on the edge of the brick.

It will be understood that when the different colors are to be produced—*i. e.*, the vines, 30 stems, flowers, and fruit—separate plungers and spouts are employed. For example, the

plungers for forming the vines and stems will perform their function, and when the brick is pushed forward a separate plunger, with its corresponding feed-spouts, is provided, which will deposit the flowers or fruits 35 in their proper position on the face of the brick. Any desired number of these plungers and feed-spouts may be employed to produce the colors desired. 40

I am aware that it is not new to apply to the face of unburned wet-clay bricks a coating or slip of clay which will burn a different color from the main body of the brick, said brick, with its coating, being repressed 45 to set the color, and afterward burning said brick, and such I do not claim.

Having thus described my invention, what I claim is—

The method herein described of ornament- 50 ing dry-clay brick, which consists in pressing the clay into brick form and then forcing into the face of the newly-formed brick a dry clay powder in the form of vines, stems, fruits, and flowers in relief or in depression. 55

In testimony whereof I affix my signature in presence of two witnesses.

J. C. ANDERSON.

Witnesses:

L. W. SINSABAUGH,
J. C. STODDARD.