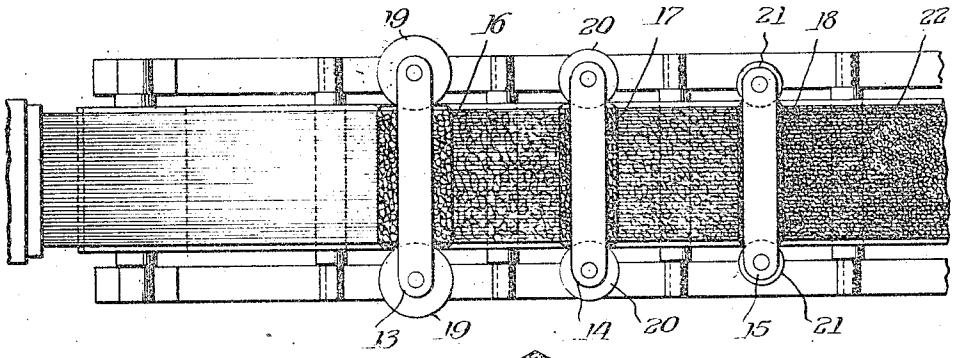
J. A. MITCHELL.

METHOD OF AND APPARATUS FOR MAKING FACING BRICKS.

APPLICATION FILED OCT. 4, 1920.

1,387,861. Patented Aug. 16, 1921.

Fig 1



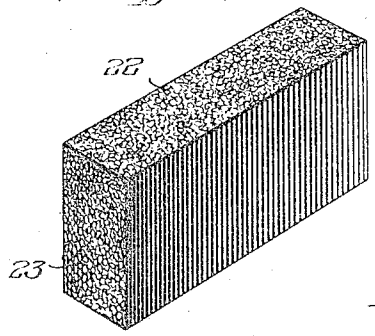


Fig 4

Fig 2

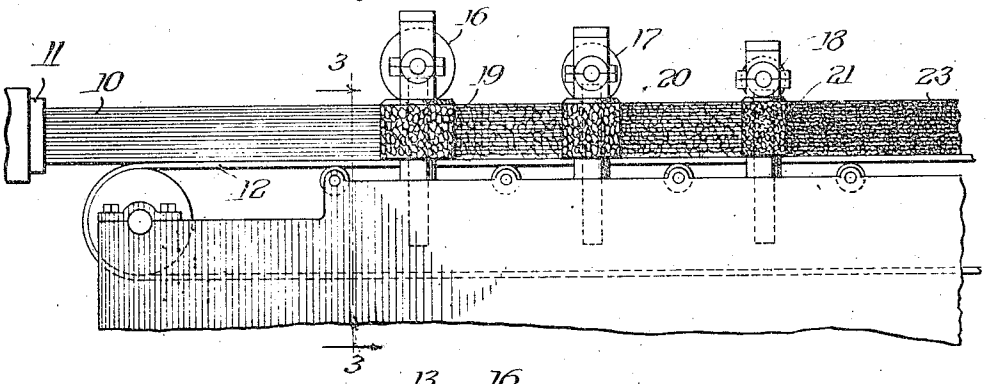
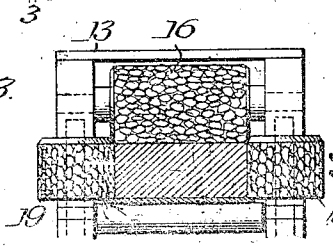


Fig 3.



Witness:-

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UNITED STATES PATENT OFFICE.

JAMES H. MITCHELL, OF DANVILLE, ILLINOIS.

METHOD OF AND APPARATUS FOR MAKING FACING-BRICKS.

1,387,861. Specification of Letters Patent. Patented Aug. 16, 1921.

Application filed October 4, 1920. Serial No. 414,392.

To all whom it may concern:

Be it known that I, JAMES H. MITCHELL, a citizen of the United States, and resident of Danville, in the county of Vermilion and State of Illinois, have invented certain new and useful Improvements in Methods of and Apparatus for Making Facing-Bricks, of which the following is a specification.

My invention relates to novel means for producing facing bricks and particularly to an improvement on the method disclosed in my prior application Serial No. 324,298, filed September 18, 1919.

One of the objects of this invention is to provide means whereby facing bricks may be produced economically and without interfering with or hindering the usual brick making process. In such process the clay, after having been suitably mixed and being of the proper consistency, is pressed through a die in the form of a continuous bar which is received by a traveling belt or conveyer and carried to the cutting wires where the bar is formed into bricks. By my invention the surfacing or marking of the bricks is accomplished at a point between the die and the cutter. The desired result is secured by mounting a plurality of rolls adjacent to the bar, these rolls being of different diameters and having on their surfaces a multitude of irregular projections, the projections being irregularly spaced. I am aware that it is not new to attempt to mark or surface a brick by means of a roll placed in a similar position, but efforts along this line have been unsuccessful for several reasons. First it is impossible to suitably mark or surface a brick by applying a single roll thereto for the reason that the pressure, in order to make the necessary indentations, must be so great as to distort the plastic material thus producing misshapen bricks. A second reason is that the marking thus produced would be uniform and of a sameness which renders the brick flat and unsightly.

By my method I secure the desired results without deforming the bar in any way. I provide a plurality of sets of rolls each of different diameter and which, for this reason, may each contain a portion of the same design. The projections on each brick may be relatively few in number and thus the pressure applied to the surface of the plastic bar will be insufficient to cause any distortion thereof. Inasmuch, however, as the same portions of the design will never register on any given area of the bar the design will be indefinitely varied. This is due to the different speeds of rotation of the rolls, due to their different diameters.

Preferably the rolls are surfaced by securing pebbles or small pieces of broken stones thereto; or a model or pattern may be made by setting pebbles or stones thereon and a suitable number of rolls cast or otherwise produced therefrom. The reason for selecting pebbles of this character is because of their irregularity and the infinite variety of forms of projections resulting from their use.

The invention will be more readily understood by reference to the accompanying drawings, wherein,

Figure 1 is a fragmentary plan view of a portion of a machine constructed in accordance with my invention;

Fig. 2 is a side elevation thereof;

Fig. 3 is a sectional view on the line 3—3 of Fig. 2; and

Fig. 4 is a perspective view of a brick such as I produce.

In the drawings it will be seen that a bar 10 of plastic clay is forced outwardly through a die 11, in the usual manner. This bar is taken up by a traveling belt 12 and conveyed toward the cutters, not shown. At an intermediate point I provide housings 13, 14, 15 within which are mounted horizontal rolls 16, 17, 18, and vertical rolls 19, 20, 21. The rolls 16, 17, 18 mark the flat sides of the bar, which sides constitute the edges 22 of the finished brick, while the rolls 19, 20, 21 mark the side edges which constitute the ends 23 of the brick.

The rolls 16 to 21 inclusive are provided with a multitude of irregular projections on their surfaces, these projections preferably being made by securing pebbles or small stones thereto or by using the said pebbles in making a pattern from which the rolls may be cast. If desired, means may be provided for adjusting the rolls laterally in order to control the depth of the impressions made thereby. It will be seen that this operation may be carried out without interruption of or interference with the usual process; furthermore that each roll may contain a relatively small number of projections and therefore that the force exerted by the roll will not be sufficient to distort the bar; furthermore that the pattern or design on each

roll may be a duplicate of the pattern on the other rolls without the possibility of similarity of the design on any successive portion of the bar; this for the reason that the rolls rotate at different speeds and thus present different surfaces for contact with the bar relative to the surface which appears on the next adjacent roll. It should furthermore be noted that the impressions formed by the first rolls may be obliterated or changed and distorted by the succeeding rolls with the result that the finished brick presents a design which is very irregular and ununiform and is highly desirable from an artistic standpoint.

Obviously the details of the invention may be varied somewhat and I do not wish to be limited except as indicated in the appended claims.

I claim:

1. The method of making ornamented bricks which consists in moving a bar of plastic clay in surface contact with a plurality of successive rolls of different diameters, each roll adding a portion of the complete design to the clay, substantially as described.

2. The method of making ornamented bricks which consists in moving a bar of plastic clay in surface contact with a plurality of successive rolls each of which contain spaced-apart irregular projections, the finished design including a portion of the marks applied by each roll, substantially as described.

3. In a device for making facing bricks, the combination of means for moving a bar of plastic clay, and a plurality of rolls of different diameters mounted in position to have surface contact with the bar, each of said rolls having irregular projections thereon, the spacing of the projections being irregular, substantially as described.

4. In a device for making facing bricks, the combination of means for moving a bar of plastic clay, and a plurality of rolls of different diameters mounted in position to have surface contact with the bar, the rolls having substantially identical designs thereon, the differences in diameter of the rolls causing different portions of the design to be applied to successive portions of the bar, substantially as described.

5. In a device for making facing bricks, the combination of means for moving a bar of plastic clay, and a plurality of rolls mounted in position to have surface contact with the bar, said rolls having irregular pebbled surfaces, substantially as described.

6. In a device of the class described, the combination of means for feeding a bar of plastic material, a plurality of rolls mounted with their surfaces in contact with the top and sides of said bar, said rolls each containing a plurality of irregular projections, the number of impressions made by the projections on any roll being less than the total number of impressions on the finished brick.

Signed at Danville, Illinois, this 18th day of September, 1920.

JAMES H. MITCHELL.