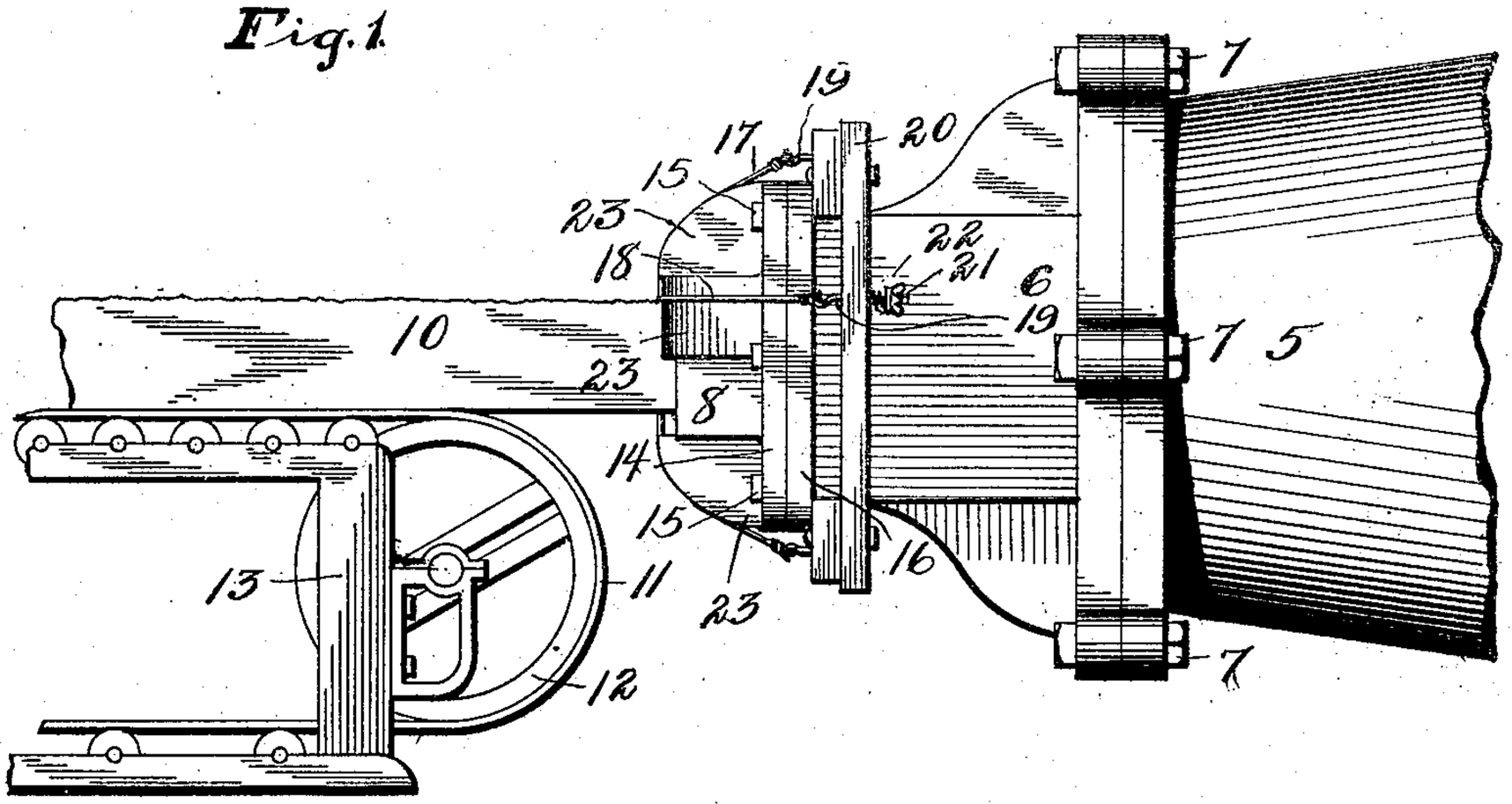
No. 842,882. PATENTED FEB. 5, 1907.

M. N. GRANT.

DEVICE FOR MAKING ORNAMENTAL BRICKS.

APPLICATION FILED APR. 23, 1906.

Fig. 1.



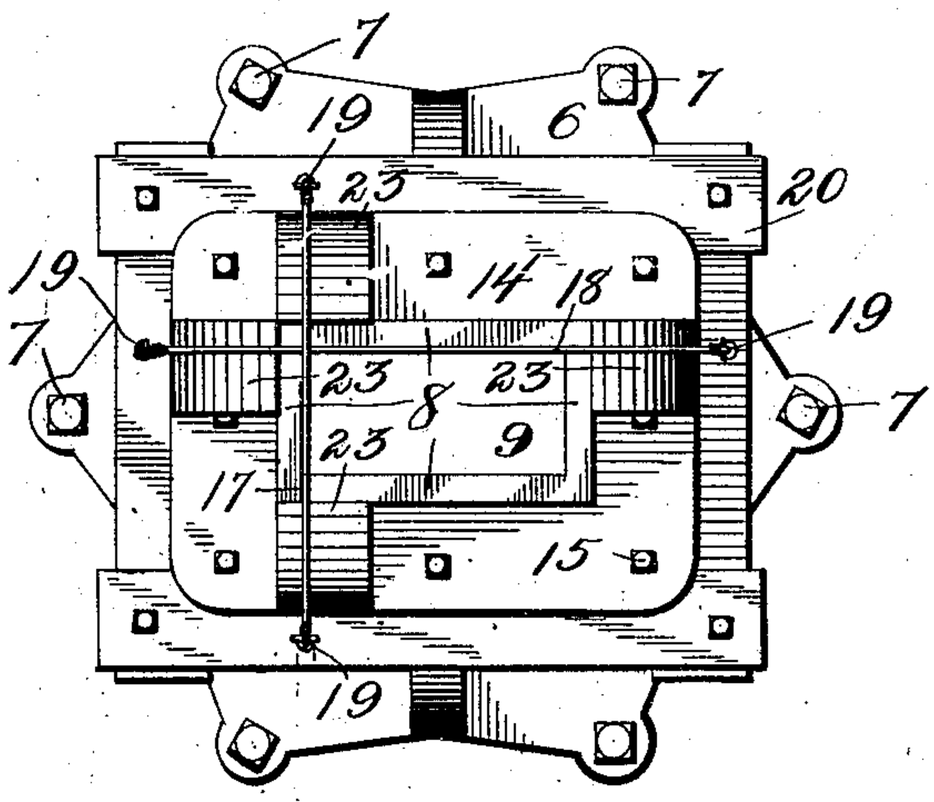


Fig. 2.

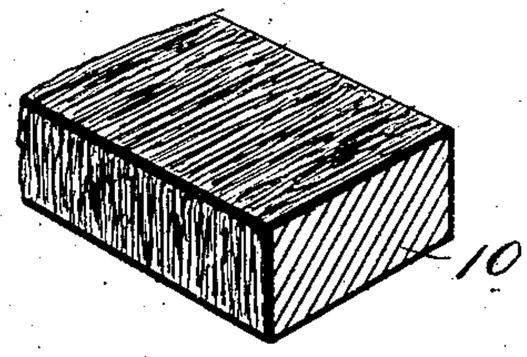


Fig. 3

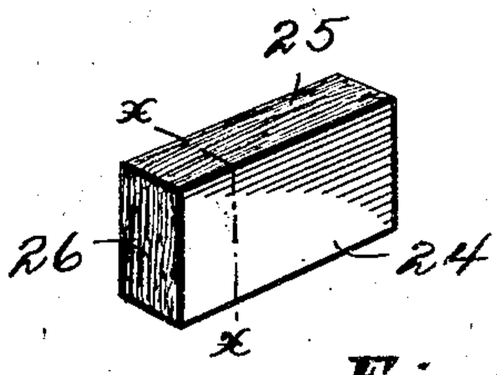


Fig. 4.

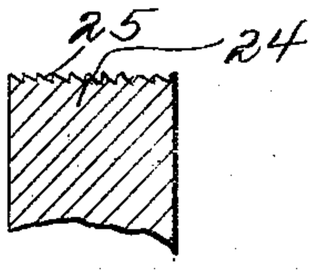


Fig 5.

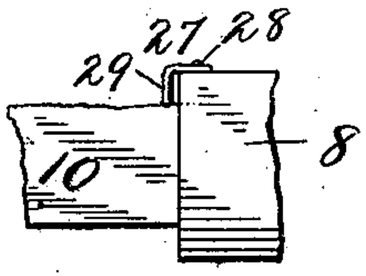


Fig. 6

WITNESSES

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DEVICE FOR MAKING ORNAMENTAL BRICKS.

No. 842,882. Specification of Letters Patent. Patented Feb. 5, 1907.

Application filed April 23, 1906. Serial No. 313,171.

To all whom it may concern:

Be it known that I, MILTON N. GRANT, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Devices for Making Ornamental Bricks, of which the following is a specification.

This invention relates to a device for making ornamental brick, and has for its object the provision of means which may be readily attached to brick-machines which are already in use, said means being adapted to roughen the face and sides of the clay which forms the brick as said clay is forced from the machine.

Further objects and advantages of the invention will be set forth in the detailed description which now follows.

In the accompanying drawings, Figure 1 is a side elevation of a brick-machine having the roughening device applied thereto. Fig. 2 is a front elevation of said machine with the clay-conveyer mechanism removed. Fig. 3 is a sectional perspective view of a portion of the clay mass which is forced from the machine. Fig. 4 is a perspective view of a brick, one of the edges and one of the ends of which have been roughened. Fig. 5 is a transverse vertical section upon line x x of the brick shown in Fig. 4 upon an enlarged scale; and Fig. 6 is a side elevation of a portion of the machine shown in Fig. 1 and of the clay mass, illustrating a modified form of roughening device.

Like numerals designate corresponding parts in all of the figures of the drawings.

The brick-machine shown in Fig. 1 will first be described, after which the method of securing this attachment in position will be set forth. This brick-machine comprises a body portion 5, to which a head 6 is secured by bolts 7. The numeral 8 (see Fig. 2) designates the walls of the channel 9, through which a continuous mass of clay 10 is forced from the body portion 5. As this clay passes from the machine it runs upon an endless belt or conveyer 11, which passes over a pulley 12, mounted in the frame 13. The walls 8, which constitute the brick-forming die, are integral with a flange 14. This flange is secured by bolts 15 to a flange 16, which is carried by the head 6. The clay mass 10 is forced in a continuous body from the machine and upon the conveyer-belt 11. This mass in width equals the length of a brick, while in height it is equal to the width of a brick. The belt 11 conveys it to a suitable cutting mechanism, (not shown,) which slices it into bricks of the proper size.

The structure so far described is all of the usual and well-known construction, such as is now in use in many brick-making plants.

The devices for roughening the brick, which are illustrated in Figs 1 and 2, comprise a vertically-disposed wire 17 and a horizontally-disposed wire 18. The ends of these wires are secured to hooks 19, said hooks passing through the rectangular frame 20, which lies behind the flange 16. The inner ends of these hooks are threaded, as at 21, for the reception of thumb-nuts 22, by virtue of which construction the wires may be placed under any desired tension. Blocks 23 rest against the outer faces of the die and the flange 14, and the wires 17 and 18 pass over these blocks, said blocks serving to hold the wires a slight distance in advance of the mouth of the die. These wires are so positioned that as the mass of clay 10 is forced from the machine the wire 18 will engage the top of the mass of clay, while the wire 17 will engage one side of the mass of clay, said wires serving to catch up and roughen the surfaces with which they are in contact. After the mass of clay 10 has been passed through the cutting mechanism, which cuts said clay up into bricks 24, one of the sides 25 and one of the ends 26 will present when baked a roughened appearance which much resembles the surface presented by crêpe paper and which forms a highly-ornamental building-brick.

In the form of the device illustrated in Fig. 6 the wires have been omitted and an L-shaped metallic plate 27 has been secured to the die 8, as at 28, a depending portion 29 of this plate serving as a scraper to roughen the upper surface of the clay clot or mass, as will be readily understood.

It will of course be understood that wires may be placed on all four sides of the die 8 to roughen both ends and both edges of the brick instead of roughening only one end and one edge thereof, if desired.

The means for tensioning the wires is important. The tighter the wires are drawn the more effect they will have in roughening

the mass of clay. It will therefore be seen that it is possible to produce bricks having their surfaces roughened to varying degrees by virtue of the construction set forth.

While the elements herein shown and described are well adapted to serve the purposes for which they are intended, it is to be understood that the invention is not limited to the precise construction set forth, but includes within its purview such changes as may be made within the scope of the appended claims.

What I claim is—

1. In a device of the character described, the combination with a machine having a die through which clay is discharged, of wires arranged at the sides of the mouth of said die and adapted to engage and roughen one side and one edge of the clay which is discharged from said die.

2. In a device of the character described, the combination with a machine having a die through which clay is discharged, of wires arranged at the sides of the mouth of said die and adapted to engage and roughen the surface of said clay, and means for placing said wires under tension.

3. In a device of the character described, the combination with a machine having a die through which clay is discharged, of wires arranged at the sides of the mouth of said die and adapted to engage and roughen the surface of the clay, means for adjusting the tension of said wires, and spacing-blocks over which said wires pass.

4. In a device of the character described, the combination with a machine having a die through which clay is forced, of wires arranged at the sides of the mouth of said die and adapted to engage and roughen the surface of said clay, a frame carried by said machine, and tensioning members carried by said frame with which the ends of said wires are engaged.

5. In a device of the character described, the combination with a machine having a die through which a mass of clay is discharged, of wires arranged for limited vibration at the sides of the mouth of said die and adapted to engage and roughen the outer face of the mass of clay which passes through said die.

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

MILTON N. GRANT.

Witnesses:

FRANK G. CAMPBELL,

C. A. VANCE.