

1,428,692.

2 SHEETS—SHEET 1.

Fig. 3

Inventor
John Herman
by Nestall and Wallen
his Attorneys

J. HERMAN.
VENEERING APPARATUS.
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2 SHEETS—SHEET 2.

Fig. 4

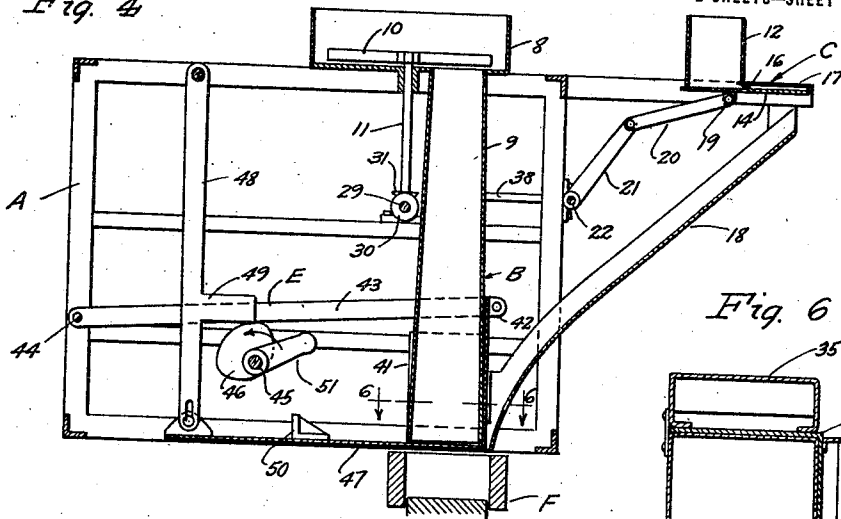


Fig. 6

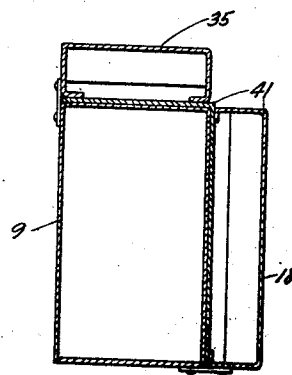


Fig. 5

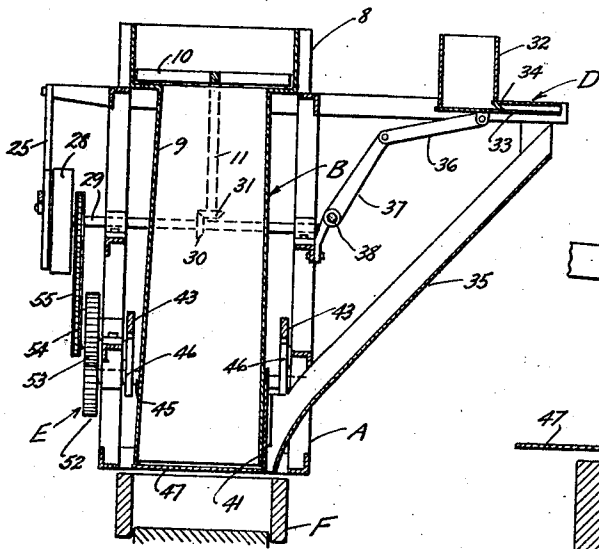
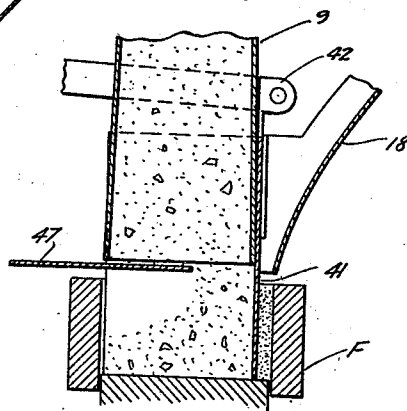


Fig. 7



Inventor
John Herman
by Westall and Wallace
his Attorneys

UNITED STATES PATENT OFFICE.

JOHN HERMAN, OF LOS ANGELES, CALIFORNIA.

VENEERING APPARATUS.

Application filed August 23, 1920. Serial No. 405,398.

To all whom it may concern:

Be it known that I, JOHN HERMAN, a citizen of the United States, and residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in a Veneering Apparatus, of which the following is a specification.

This invention relates to a veneering apparatus for brick or block machines in which facing of different character from the body of the brick may be applied thereto. The body may be made of material having certain mechanical and commercial advantages other than its ornamental appearance, while the facing which is to be exposed may be formed of material best serving for protection against the elements, ornamentation, or any other desired characteristics.

This invention relates particularly to a construction wherein there is a mold box fed with material for the body of the brick and mechanism adapted to feed facing material to the box in position on the block's body, the pulp then being cut off to complete the block. It is the primary object of this invention to provide a structure of the character described, which is simple, durable, operates upon the pulp in an efficient manner, is easily manipulated, and is speedy in operation.

These objects together with other objects and corresponding accomplishments are obtained by means of the embodiment of my invention illustrated in the accompanying drawings, in which:

Fig. 1 is a side elevation of a complete machine; Fig. 2 is a plan view; Fig. 3 is an enlarged section taken on the line 3—3 of Fig. 2 showing the measuring means for dispensing the facing material; Fig. 4 is a section as seen on the line 4—4 of Fig. 2; Fig. 5 is a section as seen on the line 5—5 of Fig. 1; Fig. 6 is an enlarged section as seen on the line 6—6 of Fig. 4; and Fig. 7 is an enlarged fragment of a portion of the machine as seen in Fig. 4, but with the cut-off plate in a different position.

Referring more particularly to the drawings, A indicates a frame, the details of construction of which are not important and may be varied to suit conditions. B indicates generally the pulp feeding and molding mechanism for the body of the block.

The mechanism for measuring and feeding the facing material for one side of the block is indicated by C. A similar mechanism for feeding facing material for another side of the block is indicated by D. The gearing for operating the several movable parts of the machine is indicated by E. A mold box for the block is indicated by F.

The structure for feeding the pulp for the body of the block will first be considered. Mounted upon the top of the frame is a pulp receptacle 8. Communicating therewith is a vertical chute 9. This chute is of the horizontal cross section of the body of the block to be formed and tapered from top to bottom, the bottom being larger. Disposed within the receptacle 8 and at the bottom thereof is a stirring impeller 10. The arms of this impeller will slide across the top of the chute opening. The impeller insures the feeding of pulp to the chute 9, the pulp not flowing easily. The impeller is driven from a shaft 11 journaled in the bottom of the receptacle. It will be noted that there is a clearance between the chute and mold box F on two of its sides. This clearance is sufficient to provide for the facing material.

Disposed on an extension of the frame is a hopper 12 for facing pulp. The hopper is provided with a sliding bottom guided on ways 13, see Fig. 3. The bottom consists of a plate 14 having an opening 15 overhung by a shear 16. Extending from the top of the shear is a wall 17 parallel to the bottom plate 14. The pulp hopper 12 is intended to be filled with pulp and the bottom reciprocated. One end of the path of travel of the bottom is such that the shear 16 is at one side of the receptacle. The other end of the travel is at or adjacent the other side. As the bottom is moved from the position shown in Figs. 3 and 4, a layer of facing pulp will be sliced off and delivered into the chute 18 disposed therebeneath. For this purpose of reciprocating the bottom, it is provided with a bracket 19 to which is pivotally connected a link 20. The link 20 is connected to a crank arm 21 fixed to a shaft 22 journaled in the frame. The shaft 22 has secured thereto a crank arm 23 secured by a connecting rod 24 to an oscillating member 25 pivotally mounted upon the frame. The oscillating member has an elongated slot through which passes a bolt

26 securing the connecting rod thereto. This construction provides for adjustment of the connecting rod and variation of the travel of the shear 16 and consequently the amount of facing material disposed. The oscillating member has an opening in which is disposed a pin 27 mounted upon a drive pulley 28. Upon rotation of the pulley 28, the pin will engage first one side of the opening in the oscillating member and then the other, rocking the latter with a period of rest between movements in either direction. The pulley 28 is mounted upon a shaft 29 having a bevel pinion 30 meshing with a bevel pinion 31 mounted on shaft 11, whereby the impeller is driven. The pulley 28 may be connected to a drive pulley or any mechanism serving as a source of power. Upon rotation of the pulley 28, the oscillating member 25 will be rocked and the bottom 14 of the hopper 12 reciprocated.

Mounted upon a sub-frame extending to one side of the main frame is a hopper 32 similar to hopper 12. It is also provided with a sliding bottom 33 constructed similar to the sliding bottom 14, with a shear 34 for the purpose of slicing off pulp and delivering it to an inclined chute 35. A link 36 connects the bottom to a crank arm 37 mounted upon a shaft 38 journaled in a frame. Fixed to the end of shaft 38 is a bevel pinion 39 meshing with a bevel pinion 40 fixed to shaft 22. Shafts 22 and 38 being geared together, the bottoms of the hoppers 12 and 34 will be moved at the same time and facing material sliced off and fed to their respective chutes.

Slidably mounted over two sides of the chute is an apron 41 adapted to be moved into the mold box F, and thus space the body of the block from the sides of the mold, so as to permit the introduction of the facing pulp. A bracket 42 is mounted on the apron and has secured thereto by pivotal joints lever arms 43. The lever arms are pivotally secured to the frame at 44. Fixed to a shaft 45 and disposed beneath the arms 43 are cams 46 to raise and lower the arms, and thereby raise and lower the apron.

Closing the bottom of the chute 9 is a plate 47 arranged to be reciprocated so as to open and close the bottom of the chute. The plate 47 is pivotally secured by a link 48 to the frame. Plate 47 is provided with an abutment 50. Mounted upon shaft 45 is an arm 51 adapted to engage the extension 49, swinging the link 48 and reciprocating the plate 47 so as to open the bottom of the chute, then engaging the abutment 50 and moving the plate 47 so as to close the bottom of the chute. Shaft 45 has a gear 52 secured thereto meshing with a gear 53. Gear 53 is secured to a shaft having a sprocket wheel 54 mounted thereon. Sprocket wheel 54 is geared by a chain 55 to a sprocket fixed

on shaft 29. Thus, the moving parts are all driven from pulley 28.

The parts of the apparatus should be so arranged that the plate 47 closes the chute, the apron 41 is first dropped into position in the box, the facing material then sliced from the hoppers so that it will slide into position as indicated in Fig. 7 and thereafter the plate 47 moved into position opening the bottom of the chute so as to deliver the body pulp to the box. The apron should then be lifted and the plate 47 moved to close the chute and divide the pulp, and the mold box with its block removed and another substituted. This cycle of operations is then repeated.

What I claim is:

1. In a veneering machine, the combination with a mold box of a chute to feed pulp thereto for the body of a block, an apron movable into said box to provide a facing space therein, a hopper for facing material, means to deliver from said hopper to said facing space a quantity of facing material, means to open said chute to said box, and means to successively move said apron into said box, deliver facing material of substantially the same dimensions as said facing space thereto and open said chute.

2. In a veneering machine, the combination with a mold box of means to feed pulp thereto for the body of a block, an apron movable into said box to provide a facing space therein, a hopper for facing material having a slidable bottom provided with a shear to slice a measured quantity substantially of the same dimensions as said facing space of pulp from said hopper, a chute for delivering said facing material to said facing space, and means to successively move said apron into said box and deliver said facing material thereto.

3. In a veneering machine, the combination with a mold box of a chute to feed pulp thereto for the body of a block, an apron movable into said box to provide a facing space therein, a hopper for facing material having a slidable bottom provided with a shear to slice a measured quantity of pulp from said hopper, a chute for delivering the facing material to said facing space, means to open the first mentioned chute to said box, and means to successively move said apron into said box, deliver said facing material thereto and open said first mentioned chute.

4. In a veneering machine, the combination with a mold box of a chute to feed pulp thereto for the body of a block, an apron slidable on the walls of said chute into said box to provide a facing space therein, a facing chute communicating with said facing space, means to dispense facing material to said chute in a layer of substantially the

same dimensions as said facing space, and means to successively move said apron into said box and dispense said facing material.

5 5. In a veneering machine, the combination of a mold box with a chute to feed pulp thereto for the body of a block, an apron slidably mounted upon said chute and movable into said box to provide a facing space therein, means to open said chute to said
10 box, a facing chute communicating with said

facing space, means to dispense facing material to said chute in a layer of substantially the same dimensions as said facing space, and means to successively move said apron into said box, dispense said facing material and open said chute. 15

In witness that I claim the foregoing I have hereunto subscribed my name this 13th day of August, 1920.

JOHN HERMAN.