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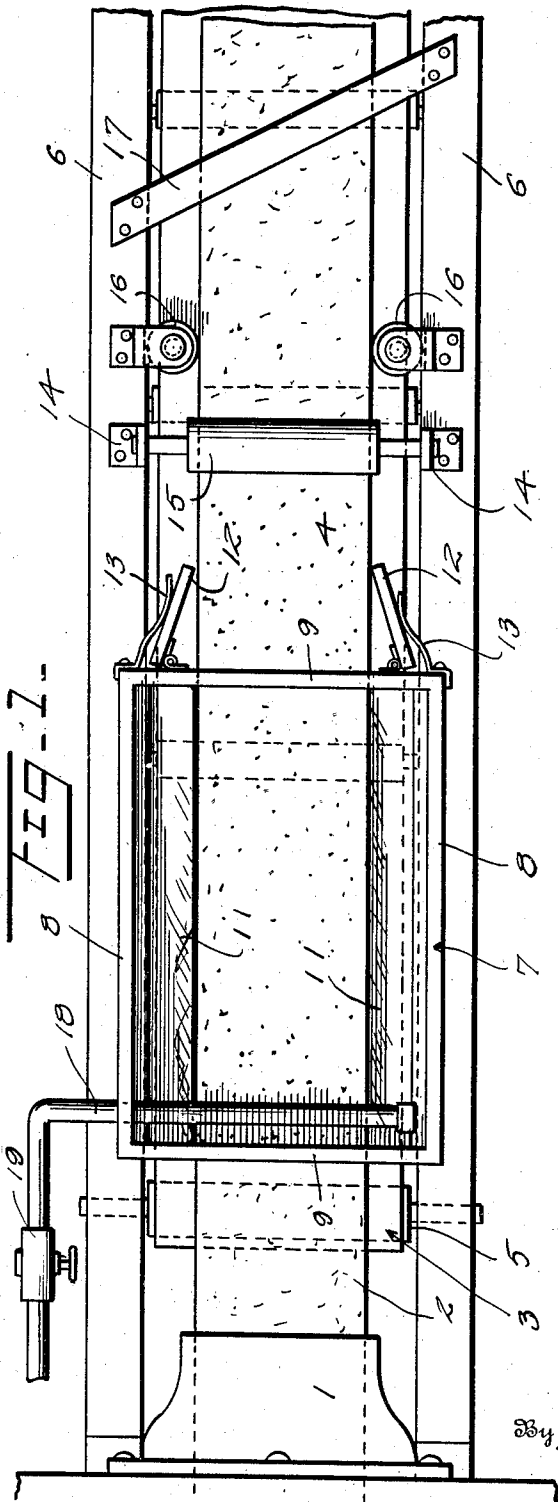
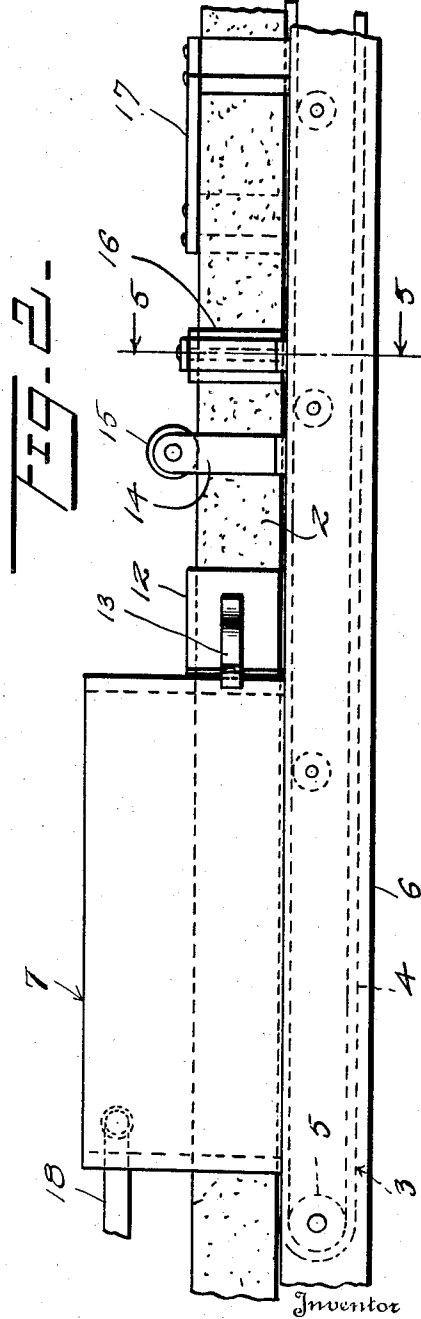
F. F. STEELE

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BRICK SANDER AND METHOD

Filed Nov. 7, 1929

2 Sheets-Sheet 1



Inventor

F.F. Steele

By *Watson E. Coleman*
Attorney

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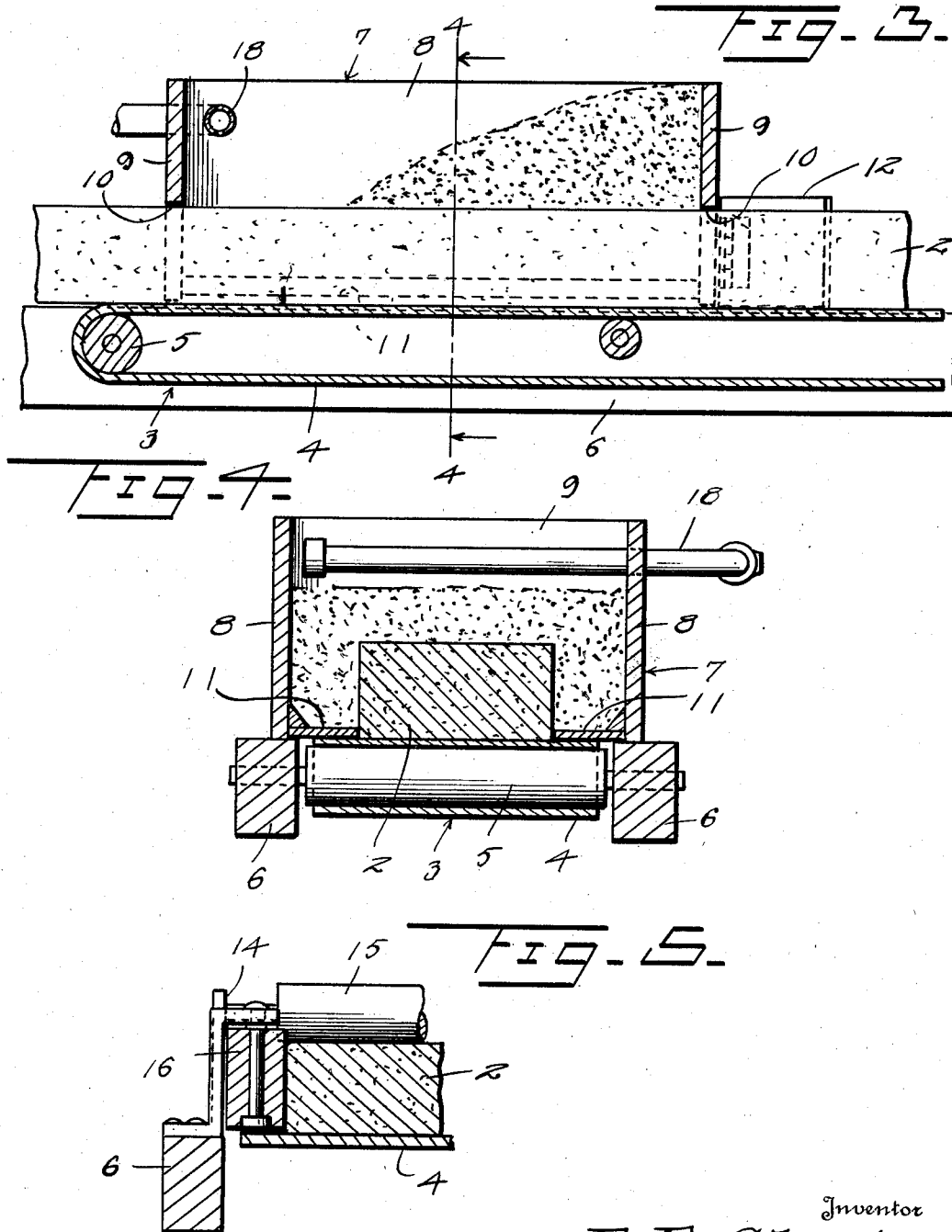
F. F. STEELE

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BRICK SANDER AND METHOD

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2 Sheets-Sheet 2



Inventor

F. F. Steele

By

Watson E. Coleman
Attorney

UNITED STATES PATENT OFFICE

FLAKE F. STEELE, OF WINSTON-SALEM, NORTH CAROLINA, ASSIGNOR TO PINE HALL
BRICK & PIPE CO., OF WINSTON-SALEM, NORTH CAROLINA, A CORPORATION OF
NORTH CAROLINA

BRICK SANDER AND METHOD

Application filed November 7, 1929. Serial No. 405,450.

This invention relates to improvements in finished brick and pertains particularly to an improved means for applying a surfacing material to a brick.

5 The primary object of the invention is to provide a brick having a sanded surface or face which will be in all respects similar to sanded handmade bricks although the present invention is designed to apply the sand to the
10 bricks or to the clay column from which the bricks are cut, as the same issues from the die of the brick machine.

Another object of the invention is to provide an improved means for applying sand to
15 a column of brick clay or to the cut brick wherein the body of clay is prepared previously to the application of the sand thereto so that the surfaces to be sanded will be softened permitting the sand to be easily
20 embedded therein.

Still another object of the invention is to provide an improved means for applying sand to a clay column from which brick are to be formed by forcing the clay column
25 through a pile of sand, the weight of the sand pile against the clay column being depended upon to supply the necessary amount of pressure to embed the sand therein.

A still further object of the invention is to
30 provide a structure of unique design for applying sand to a clay column from which bricks are to be formed.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings forming part of this specification, with the understanding, however,
35 that the invention is not confined to any strict conformity with the showing of the drawings but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended
40 claims.

In the drawings:—

Figure 1 is a view in top plan of the structure embodying the present invention.

50 Figure 2 is a side elevational view of the same.

Figure 3 is a central longitudinal section through the sand receptacle of the device.

Figure 4 is a transverse section taken on the line 4—4 of Figure 3.

Figure 5 is a sectional view taken on the line 5—5 of Figure 2.

Referring more particularly to the drawings wherein like numerals of reference indicate corresponding parts throughout the several views, the numeral 1 indicates a die
60 forming a part of a stiff mud auger brick forming machine, through which a column of stiff clay is forced in the correct size to form brick of the usual length and width, wire cutters (not shown) being normally employed for cutting this column transversely
65 to form the brick. The stiff clay column is indicated generally by the numeral 2 and as the same issues from the die it moves onto a moving belt conveyor 3 by which it is carried
70 to the cutting machine. These conveyors usually comprise a belt 4 moving over transverse rollers 5 which are mounted between stationary side rails 6.

In carrying out the present invention there
75 is provided a box or hopper 7 which is open top and bottom as shown, the box being placed over the conveyor belt 4 with the side walls 8 resting upon the rails 6. Each of the end walls 9 of the box has formed there-
80 through an opening 10 which is of the proper size and shape to permit the clay column 2 to pass therethrough. Secured to the inner face of each side wall of the box is a flap 11 which is preferably of belting material and which
85 is of sufficient width to extend in to a point in close proximity to the side of the clay column passing through the box, the conveyor belt 4 supporting the flaps in the manner shown.

At the forward or outlet end of the box 7
90 there is pivotally attached to the forward end wall at each side of the clay column a wiper blade 12 which is normally urged against the adjacent side of the clay column
95 by a spring 13.

Forwardly of the wiper blades 12 there is mounted upon suitable side uprights 14 a roller 15 which extends transversely of the top of the clay column and which is designed
100 to bear lightly thereagainst. Forwardly of

the supports 14 for the roller 15 there are mounted at the sides of the clay column the upright rollers 16 which bear against the adjacent sides of the column and forwardly of these side or upright rollers there is arranged over the clay column at an oblique angle thereto a scraper blade 17 which acts to remove surplus sand from the column of clay.

In the rear or inlet end of the box 7 there is mounted to extend transversely thereof over the clay column a water pipe 18 which is perforated to eject a spray of water onto the column as it passes through the box. The control of the water emitted from this pipe is maintained through the use of a valve 19.

In carrying out a sanding operation with the apparatus described, sand is stacked in the box 7 in the forward end thereof in the manner shown to cover the column of clay passing therethrough. The clay column in the rear end of the box is left uncovered so that water sprayed from the pipe 18 will come directly into contact therewith so that the top and sides of the column will be softened. As this softened portion of the column moves through the mound of sand the faces thereof will have a substantial amount of the sand ground thereinto and then as the column passes out of the box the wipers 12 will remove excess sand from the sides and the rollers 15 and 16 will firmly press the sand into the column as it passes thereby.

By providing the flaps 11 in the bottom of the box 7 at the sides of the clay column the water discharged into the box is prevented from running out and also the mound of sand is supported in place at the sides of the clay column. Due to the fact that the clay column moves through the sand away from that end of the box in which the water spray pipe is positioned the sand is kept stacked in the forward end of the box leaving a portion of the clay column uncovered for the action of the water sprayed thereon.

After the application of the sand to the brick column the same may be cut to form the bricks of the usual thickness and these after being burned give the brick a thoroughly sanded surface which will not rub clean.

While I have confined my description to the application of the sand to an uncut column of clay it is of course to be understood that I do not wish to be limited in any manner by this description for it will be obvious that the same method herein described may be employed for applying sand to the faces of brick after the same have been cut.

Having thus described my invention, what I claim is:—

1. The herein described method of sanding a clay body which consists in flushing the same with water to soak into and soften the surfaces to be sanded and then conveying the

same through a mound of sand to permit the same to be embedded in the body through frictional contact of the sand therewith under the pressure of the weight exerted on the body by the sand mound.

2. The herein described method of producing a sanded brick which consists in flushing the surfaces of the clay body with water to soften the same and retaining the water thereabout to thoroughly soften the surfaces, then conveying the same through a mound of sand to cause particles thereof to adhere to the moistened surfaces, then moving the body between pressing devices for forcing the sand thereinto.

3. A device for sanding a brick clay column, comprising a receptacle of substantial depth having opposite walls provided with apertures for the passage therethrough of a formed clay column, the receptacle being of substantially greater width than the column and designed to contain sand covering the column, means in the receptacle above the clay column for flushing water thereon, means in the lower part of the receptacle at each side thereof for preventing the escape of material therein, and means for removing excess sand from the column after the same has passed through the receptacle.

4. A device for sanding a brick clay column, comprising a receptacle of substantial depth having opposite walls provided with apertures for the passage therethrough of a formed clay column, the receptacle being of substantially greater width than the column and designed to contain sand covering the column, means in the receptacle above the clay column for flushing water thereon, means in the lower part of the receptacle at each side thereof for preventing the escape of material therein, and spring pressed wipers arranged to engage the sanded faces of the column to remove excess sand therefrom.

5. A device for sanding a brick clay column, comprising a receptacle of substantial depth having opposite walls provided with apertures for the passage therethrough of a formed clay column, the receptacle being of substantially greater width than the column and designed to contain sand covering the column, means in the receptacle above the clay column for flushing water thereon, means in the lower part of the receptacle at each side thereof for preventing the escape of material therein, wiper members arranged to remove excess sand from the sanded surfaces of the column, and pressing rollers arranged to apply pressure to the sanded surfaces for thoroughly embedding the sand therein.

6. A device for applying granular material to a brick clay column, comprising a receptacle having openings through opposite walls thereof for the passage of a clay col-

umn therethrough, the receptacle being
of greater width than the column and
of a depth greater than the height there-
of, the receptacle being designed to con-
tain sand to cover the top and sides of the
column, means for discharging water into
the receptacle at a point adjacent the open-
ing through which the column enters, and
means in the lower part of the receptacle at
the sides of the column for preventing the
escape of sand or water, whereby the column
faces are caused to become thoroughly soaked
before passing through the sand.

In testimony whereof I hereunto affix my
signature.

FLAKE F. STEELE.

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