E. T. COLE.

BRICK CLEANING MACHINE.

APPLICATION FILED JUNE 10, 1911.

1,031,107.

Patented July 2, 1912.

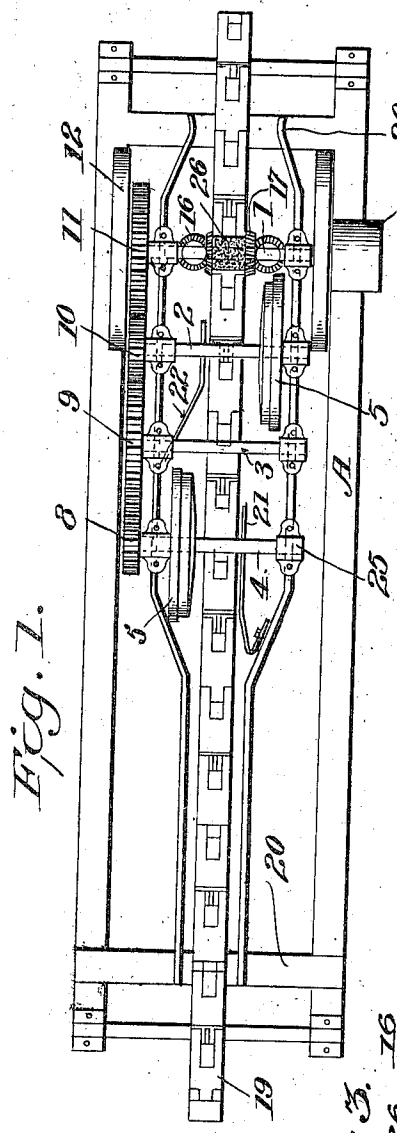

Fig. 1.

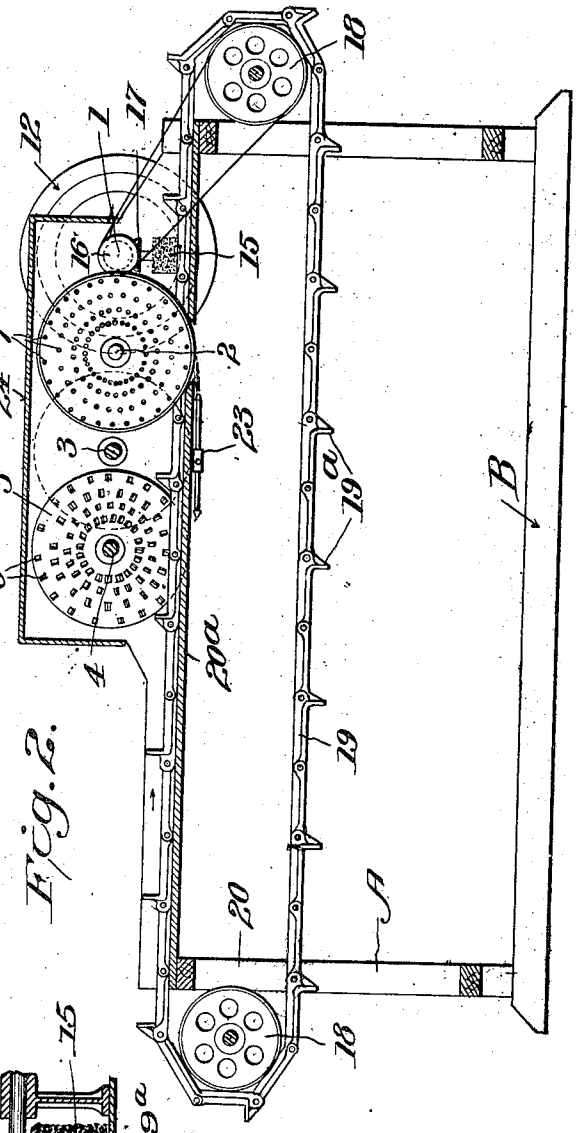

Fig. 2.

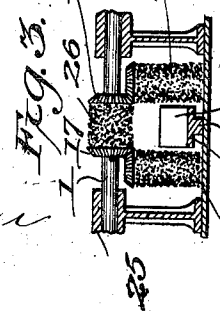

Fig. 3.

WITNESSES

C. M. Waelder

Edith L. Smith

Eli J. Cole

INVENTOR

by Wm. E. Jenner

Attorney

UNITED STATES PATENT OFFICE.

ELI T. COLE, OF RICHMOND, VIRGINIA.

BRICK-CLEANING MACHINE.

1,031,107. Specification of Letters Patent. Patented July 2, 1912.

Application filed June 10, 1911. Serial No. 632,507.

To all whom it may concern:

Be it known that I, ELI T. COLE, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Brick-Cleaning Machines, of which the following is a specification.

This invention relates to brick cleaning machines, and particularly to machines for cleaning old brick by removing mortar and dirt therefrom.

The machine comprises a pair of rotary toothed heads or disks, an endless belt conveyer for carrying the bricks thereto, and rotary brushes for cleaning the bricks after they pass the disks.

The object of the invention is to provide a simple and effective machine of the kind stated, all the parts being driven by one shaft, and provided with improved devices for holding the bricks against the rotary heads.

The machine is illustrated in the accompanying drawings in which—

Figure 1 is a plan of the machine and Fig. 2 is a longitudinal vertical section. Fig. 3 is a detail in vertical section.

Referring specifically to the drawings, A indicates a main frame having sills or skids B. 1 indicates a transverse driving shaft mounted on the frame and provided with fly wheels 12 and a pulley 13 to which power may be applied. The shaft 1 has a gear 11 which meshes with a gear 10 on a transverse shaft 2, supported on the frame of the machine, and this shaft 2 has thereon a rotary disk or head 5. The gear 10 meshes with a gear 9 on a countershaft 3 which gear meshes with a gear 8 on a shaft 4 which carries another head 5 oppositely presented with respect to the head above mentioned. The various shafts are supported in bearing boxes 25 on frames 20 extending lengthwise of the machine on opposite sides of the traveling belt 19 which passes around wheels 18 at opposite ends of the machine. The belt has projections 19^a against which the brick are placed to advance the same, as the upper run of the belt passes along a guide or plate 20^a which is integral with the frames 20, and forms a bottom or table along which the belt travels and is supported. Each disk 5 has teeth 6 on the face thereof, secured by nuts 7. Opposite the respective disks are springs 21 and 22 fastened to the frames 20 and located in proper position to press bricks carried by the belt against the respective rotary heads, so that said heads will remove the motar from the sides of the bricks.

Mounted on the shaft 1 is a brush 26 which scours the top of a brick passing thereunder on the belt, and said shaft 1 also has bevel gears 16 thereon which mesh with bevel gears 17 on the upper ends of short vertical shafts which carry brushes 15 located at opposite sides of the belt, in position to scour the sides of the bricks after they pass the rotary heads. 24 is a cover of metal or the like, over the working parts of the machine, and 23 is a spray pipe or sprinkler to settle dust resulting from the grinding action of the heads.

In operation, the bricks are fed onto the belt and are carried thereby along the trough formed by the parts 20 and 20^a and are taken to the first disk 5 which cleans one side, the bricks being pressed against the disk by the spring 21, and thence they are carried to the second disk against which they are pressed by the spring 22, to clean the other side, after which they pass between the rotary brushes 15 and under the rotary brush 26 which removes the dirt from three sides, and the bricks are then delivered at the end of the machine.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a machine of the kind described, the combination of a traveling belt adapted to convey bricks, cleaning disks located at opposite sides of the belt, to clean opposite sides of the bricks, a shaft extending across and above the belt, a rotary brush on said shaft, vertical rotary brushes at opposite sides of the belt, and gearing between the said shaft and the vertical brushes.

2. In a machine of the character described,

the combination of a trough, a traveling conveyer the upper run of which travels along the bottom of said trough, a pair of rotary disks located in the trough at opposite sides of the belt, means to press bricks on the belt against said disks, a horizontal brush located above the belt, a pair of vertical rotary brushes located in the trough at opposite sides of the belt, and means to drive the belt, the disks, and the brushes.

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

ELI T. COLE.

Witnesses:
L. H. DREW,
W. A. CHILDERS.