

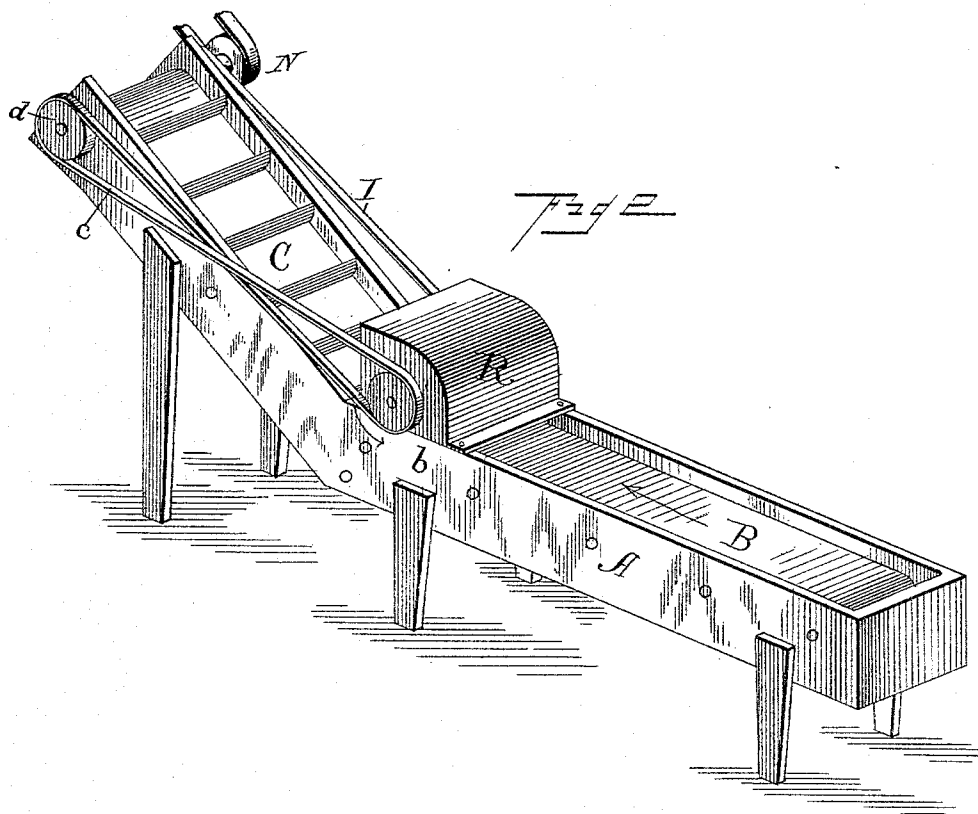
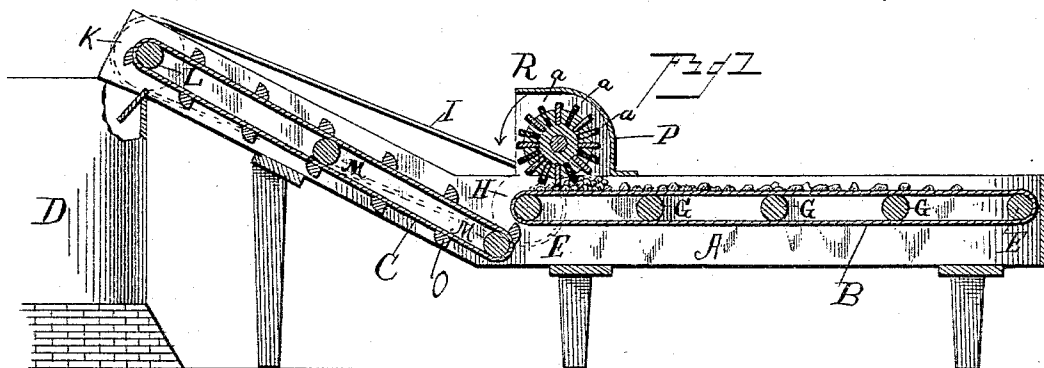
(No Model.)

J. EVANS.

CLAY PULVERIZER AND CONVEYER.

No. 399,025.

Patented Mar. 5, 1889.



WITNESSES,

F. L. Ourand
H. W. Sterling

INVENTOR,

James Evans
By
E. W. Gurschlagh
Attorney.

UNITED STATES PATENT OFFICE.

JAMES EVANS, OF PHILADELPHIA, PENNSYLVANIA.

CLAY PULVERIZER AND CONVEYER.

SPECIFICATION forming part of Letters Patent No. 399,025, dated March 5, 1889.

Application filed November 22, 1888. Serial No. 291,533. (No model.)

To all whom it may concern:

Be it known that I, JAMES EVANS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Devices for Pulverizing and Conveying Clay; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in devices for pulverizing and conveying clay.

The object of my invention is to provide a device which will convey the clay from the bank or pit to the machine which gives form to the brick, and in reducing the clay to a finely-divided condition and separating the stones therefrom while it is in transit.

My invention therefore consists of an endless belt for conveying the clay mounted in a suitable frame, and a spiked drum adapted to revolve in close proximity to the upper side of the belt to disintegrate the clay and free the same from stones or pebbles while the clay is in transit from the bank or pit to the machine.

My invention consists, further, in the arrangement of conveying-belts which convey the clay in a horizontal plane under the disintegrator and then deposit the clay into a conveyer set at an angle to a horizontal line, which carries the clay and deposits it in the brick-making machine.

Referring to the drawings, Figure 1 is a longitudinal vertical sectional view of my improved machine. Fig. 2 is a view in perspective.

A indicates a frame in which are mounted the endless belts or conveyers B and C, the belt B being arranged to travel in a horizontal plane, while the belt or carrier is arranged at an angle and adapted to take the clay as it comes from the belt B and carry it up and deposit it into the tempering-chamber D of the brick-making machine.

The belt or carrier B is made of rubber or other suitable material and has its surface perfectly plain. Said belt is mounted on suit-

able rollers, E, and intermediate supporting-rolls, G, which prevents the belt or carrier from sagging under its load of clay. The outer end of the roller E is provided with a band-pulley, H, (shown in dotted lines in Fig. 1,) around which the band I passes, said band being passed around the band-pulley K on the roller L. The carrier C is also supported and driven by the rolls L and M, the outer end of the roller L being provided with a band-pulley, N, by which the device is driven from any suitable source of power.

The carrier C is provided with transverse slats O, which prevent the clay from rolling down the inclined surface of the carrier.

P is a drum mounted in suitable bearings in the frame A, and is provided with spikes a.

The drum P is covered by a hood, R, which prevents the clay and stone from being thrown out of the machine by the rotation of the drum. The outer end of the drum P is provided with a band-pulley, b, around which the band c passes, said band being passed around the pulley d, located on the end of the roller L.

The belt c is crossed, as shown in Fig. 2, so as to give to the drum a rotation in the direction of the arrow and in a reverse direction to that of the carrier.

The operation of my device is as follows: The clay is shoveled from the pit or clay-bed onto the carrier B, and is carried along until it comes in contact with the spikes a on the drum P, where the clay is pulverized by the spikes. The fine clay passes onto the carrier C and is deposited in the machine D. The stones and large gravel are thrown back by the spikes and can be readily removed by the workmen; and in the preparation of the clay by the means just described I am enabled to deliver the clay in large quantities into the machine in the proper condition for tempering, and at the same time the clay will be free from stones.

It will be noticed that the carriers B and C and the pulverizing-drum are all driven from the power applied to the shaft or roller L.

What I claim is—

1. A device for disintegrating and conveying clay to the machine, an endless belt or

carrier, and a spiked drum located over said carrier to disintegrate the clay on said carrier as it passes to the machine.

2. A device for disintegrating and conveying clay from the pit to the machine, a horizontal traveling belt or carrier, a disintegrating device located over and adapted to pulverize the clay on said carrier, and an inclined

carrier for conveying the clay upward into the machine, as set forth. 10

In testimony whereof I affix my signature in the presence of two subscribing witnesses.
JAMES EVANS.

Witnesses:

WILLIAM GODFREY,
JOSEPH H. MARTIN.