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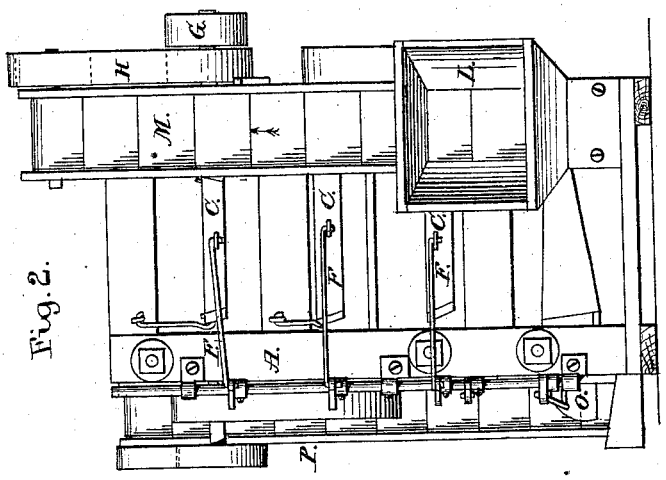
D. RUDY.

Clay-Pulverizer.

No. 160,618. Patented March 9, 1875.

Fig. 2.



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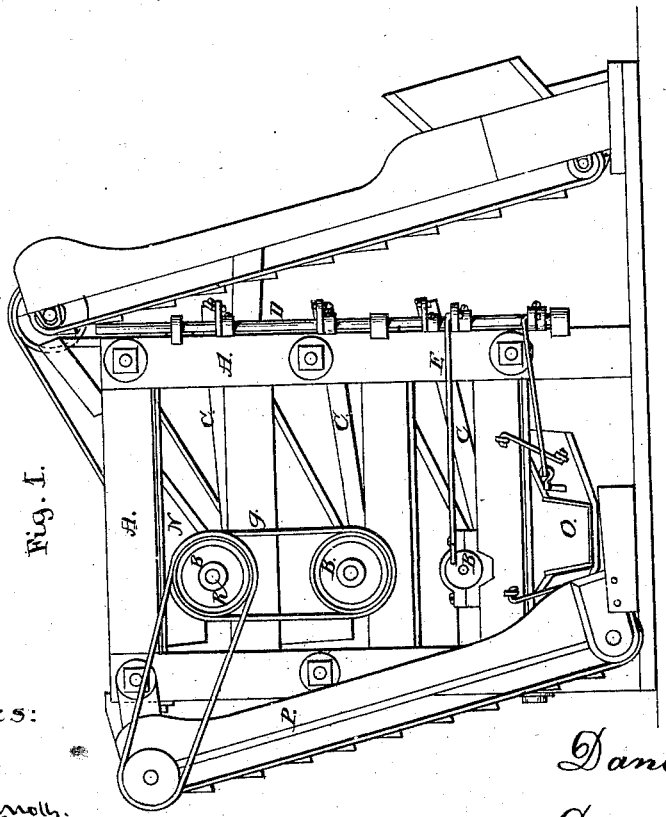

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Attorney

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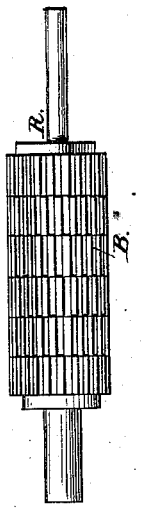
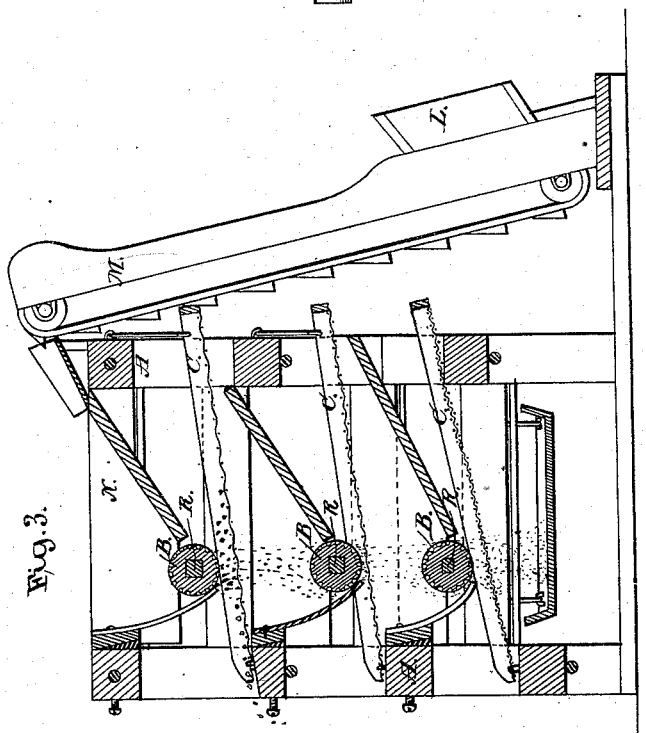


Fig. 3.



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UNITED STATES PATENT OFFICE.

DANIEL RUDY, OF CIRCLEVILLE, OHIO.

IMPROVEMENT IN CLAY PULVERIZERS.

Specification forming part of Letters Patent No. **160,618**, dated March 9, 1875; application filed February 24, 1875.

To all whom it may concern:

Be it known that I, DANIEL RUDY, of Circleville, in the county of Pickaway and State of Ohio, have invented an Improvement in Machines for Pulverizing Clay and separating therefrom the stones and other coarse materials, of which the following is a specification:

My invention consists of a pulverizing-roller, in combination with separate concave springs or an elastic bed for supporting the clay while the roller revolves therein, and in other improvements which will be more fully described hereafter.

In the accompanying drawings, Figure 1 is a side view of my improved machine. Fig. 2 is an end view of the same. Fig. 3 is a vertical section of my machine. Fig. 4 is a detached view of the pulverizing-rollers.

The frame A of my machine should be made strong and of suitable form and height to arrange thereon several grinding-rollers, B, and sieves C, which are vibrated by means of the rocking crank-shaft D and the connecting-rods E and F. The pulverizing-rollers B are set in motion by the power-pulley G and bands H and I, and they revolve in the clay which rests on the concave plate-springs K, which are curved to form a bed or trough, and work independent of each other, so as to allow stones to pass through without breaking or stopping the machine.

The clay is shoveled into the hopper L, or it may be dumped into the hopper from a cart, when the elevator M carries it up and discharges it into the feed-hopper N, to be brought under the action of the upper roller B, after which it falls through the upper sieve C, which is very coarse and separates only the larger stones, discharging them from the machine. The clay thus coarsely pulverized now descends to the second roller B, by which it is more finely pulverized, when the second sieve C separates the stones of a smaller size, while the finer clay passes down through the sieve to be again pulverized by the third roller B, and the third sieve C separates the gravel, which would interfere with making brick.

Being thus fully pulverized, the fine clay is now slowly discharged from the shoe O into the second elevator P, which carries the clay again to the top of the machine to be delivered into the brick-machine, which may be placed near by for that purpose.

My pulverizing-rollers had better be cast in sections, as represented in the drawings, and then put on the shaft R, which is square, as seen in Fig. 4. By this construction I am able to use coarser or finer rollers, as may be found necessary on account of the kind of clay to be pulverized, and yet employ the same shaft R, by simply removing and replacing the sections of the rollers. A great expense is thus saved by using the same shaft.

Having thus fully described my invention, I claim—

1. The pulverizing-rollers B, in combination with springs or elastic bed for supporting the clay, substantially as set forth.

2. The series of rollers B, in combination with the sieves C, for separating successively the larger and then the smaller stones and the gravel, substantially as set forth.

DANIEL RUDY.

Witnesses:

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THOMAS C. CONNOLLY.