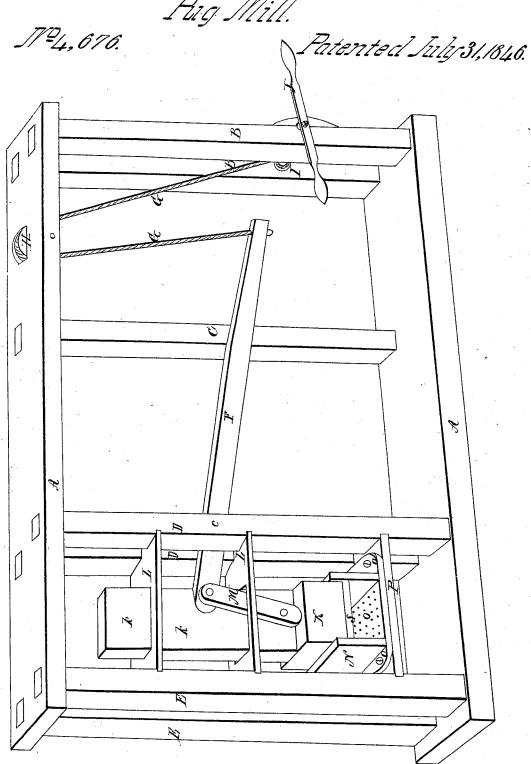
Miller & Roller; Pug Mill.



## UNITED STATES PATENT OFFICE.

SAML MILLER AND GEO. ROLLER, OF CARROLL COUNTY, MARYLAND.

## TEMPERING CLAY.

Specification of Letters Patent No. 4,676, dated July 31, 1846.

To all whom it may concern:

Be it known that we, SAMUEL MILLER and George Roller, of the county of Carroll and State of Maryland, have invented 5 a new and useful Machine for the Cleansing and Preparation of Potters' Clay, and that the following is a full and exact description thereof.

The nature of our invention consists in 10 forcing potters' clay reduced to a proper consistency through a sieve or screen and thus cleansing it from gravel and tempering it by one and the same process, and to enable others skilled in the art to make and use 15 our invention, we will proceed to describe

its construction and operation.

A A, B B, C, D D, E E represent the frame work of which the sills A A should be twelve feet (12) long six inches (6) 20 thick, by twelve inches (12) wide; the posts B B, C, should be about eight feet (8) long and about four inches square (4); the remaining posts D D, E E of the same length but stronger, (say six inches square) these
25 seven posts should be firmly mortised into
the sills as represented in the drawing.
Upon a strong plank platform three inches
thick lettered P and let into grooves cut into the posts D D E E, which for the sake of distinction we call the press posts, is fastened by four bolts or screws (two of which a a are seen in the drawing) the screen box N. This box should be from eight to twelve inches by about six inches 35 deep, should be made of iron and sufficiently strong. The screen O, forms the bottom of this box. The screen should also be of iron and be perforated by a great number of holes (say from twelve hundred to fifteen

hundred in a screen of the above mentioned 40 size) sufficiently small to prevent the passage of such gravel, &c., as would render the clay unfit for the manufacture of earthen ware. Working to the bottom of the screen box and rising above it in a manner here- 45 after described we construct a follower K corresponding in size to the inside of the iron box N. The lower surface of the follower should be faced with an iron plate S. The perpendicular direction of K is main- 50 tained by means of an arm k which passes through the planks L L, which planks are grooved into the upper part of the press posts D D, E E. Attached to the follower by means of arm M is the lever F worked 55 by means of a rope G G passing over a pulley H in the upper sill of the frame and thence is fastened to a windlass I attached to the posts B B, and worked by the bar or lever J. If now the screen box N be filled 60 with potters' earth or clay, after it has passed through the mill usually made use of to crush it having been softened by the addition of water, and power be applied to the follower by means of the machinery here- 65 tofore described the clay will be forced through the holes in the screen cleansed and tempered.

What we claim as our invention and desire to secure by Letters Patent is-

The principle of cleansing and tempering potters' clay by forcing it through a sieve or screen as herein described.

SAMUEL MILLER. GEORGE ROLLER.

Witnesses: HENRY N. BRINKMAN, JACOB KERLINGER.