

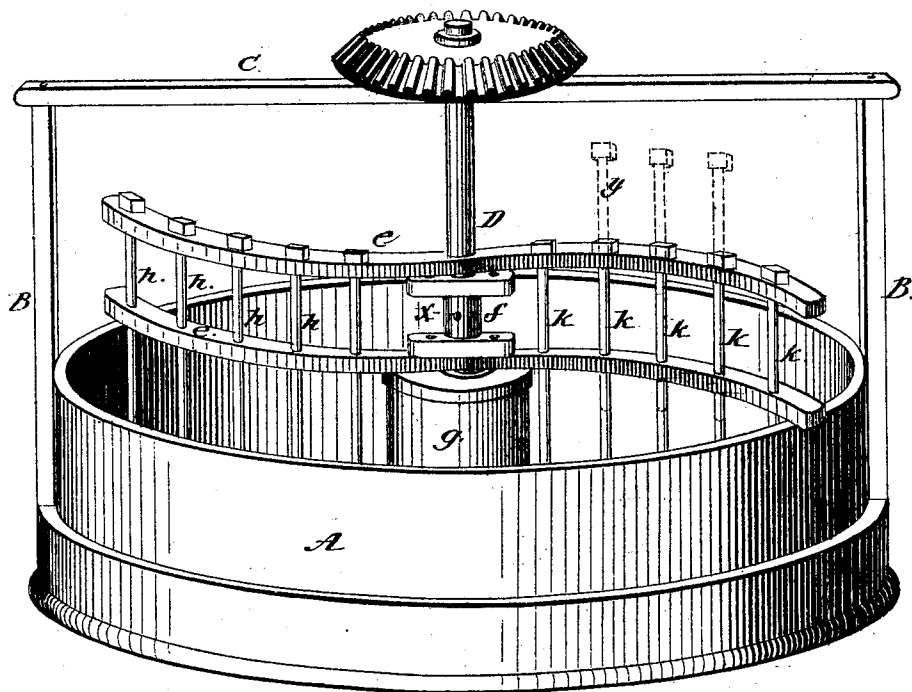
S. BARNES.

Improvement in Machine for Tempering Clay.

No. 128,278.

Patented June 25, 1872.

Fig. 1.



WITNESSES:

Wm. W. S. Dyre,

Edw. W. Down

INVENTOR:

Samuel Barnes

By J. J. Johnston & Bros.

his attorneys

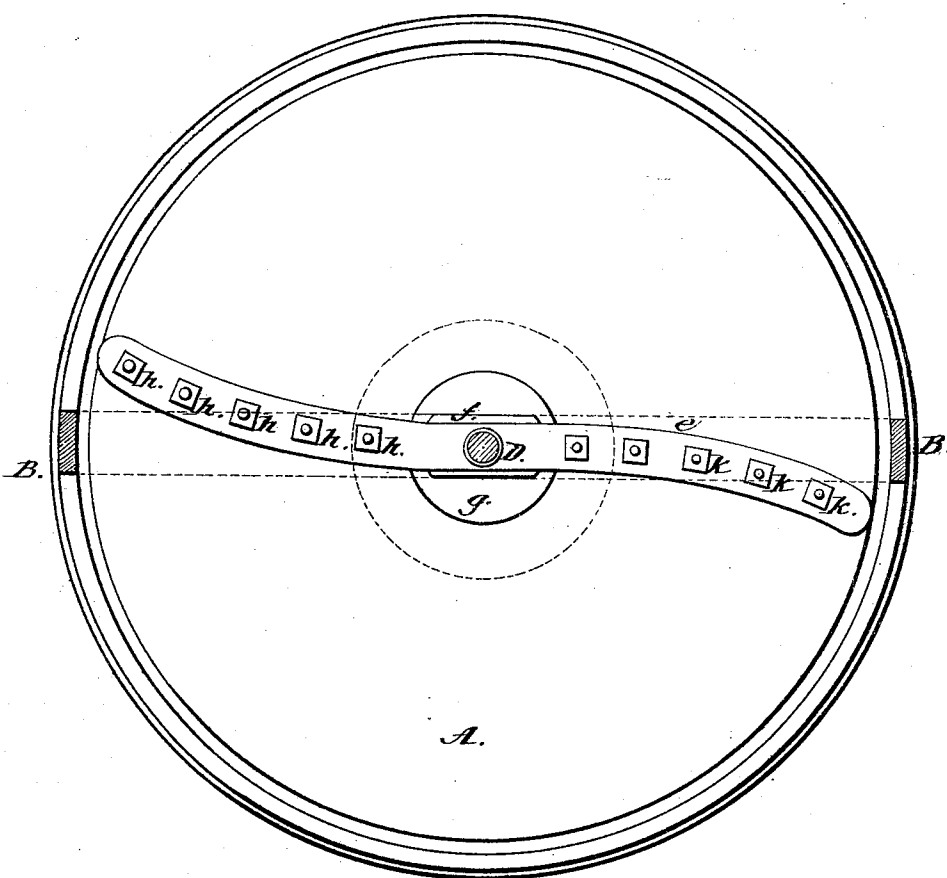
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Fig. 2.



WITNESSES:

Wm. W. S. Dyre,
Edw. W. Bonn

INVENTOR:

Samuel Barnes
By J. J. Johnston & Co.
his attorneys

UNITED STATES PATENT OFFICE.

SAMUEL BARNES, OF ROCHESTER, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR TEMPERING CLAY.

Specification forming part of Letters Patent No. 128,278, dated June 25, 1872.

To all whom it may concern:

Be it known that I, SAMUEL BARNES, of Rochester, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Machine for Tempering Clay; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in providing the kneading-chamber of a clay-tempering machine with removable curved arms furnished with detachable kneading-fingers, the curvature of the said arms and the arrangement of said fingers with relation to each other and the body of the kneading-chamber being such that in the operation of tempering the clay it will be gradually drawn from the sides of the chamber toward its center, and by reversing the motion of the said arms and fingers the clay will be carried from the center of the chamber toward its sides.

To enable others skilled in the art to make and use my invention, I will proceed to describe more fully its construction and operation.

In the accompanying drawing, which forms part of my specification, Figure 1 is a side elevation of my improvement in machine for tempering clay. Fig. 2 is a top view or plan of the same.

A represents the tempering-chamber, to the sides of which are secured upright timbers B, to the upper end of which is secured a cross-timber or beam, C. These timbers are used for supporting the bearings for the upper end of the shaft D, the lower end of which has its bearing in the bottom of the tempering-chamber A. The lower bearing of the shaft D is

protected by a guard, *g*, which also shields the shaft D to a point above the top edge of the tempering-chamber. The curved arms *e* are secured to the piece marked *f*, through which the shaft passes, and which is bolted to the shaft, as indicated at *x*. Kneading-fingers *h* and *k* are placed in openings in the curved arms *e*, and are so arranged with relation to each other that the fingers *h* will pass through the clay which passes between the fingers *k*, and the fingers *k* through the clay that passes between the fingers *h*, both series of fingers moving the clay in curved lines toward the guard *g* or out toward the sides of the chamber A, the outward or inward motion of the clay being dependent upon the backward or forward motion of the curved arms *e*.

By constructing a machine as hereinbefore described clay for fire-brick or common building brick will be thoroughly and evenly tempered, with a saving of time and economy of power.

The kneading-fingers *h* and *k* are detachable, as indicated by the dotted lines *y*, whereby they can be readily removed for repairs in case of accident, which is a great consideration in machines for tempering clay.

Having thus described the nature, construction, and operation of my improvement, what I claim as of my invention is—

A machine for tempering clay, provided with detachable curved arms *e* and detachable kneading-fingers *h* and *k*, constructed, arranged, and operating as herein described.

SAMUEL BARNES.

Witnesses:

A. C. JOHNSTON,
JAMES J. JOHNSTON.