N. GODDARD.

Clay-Sifter.

No. 202,717. Patented April 23, 1878.

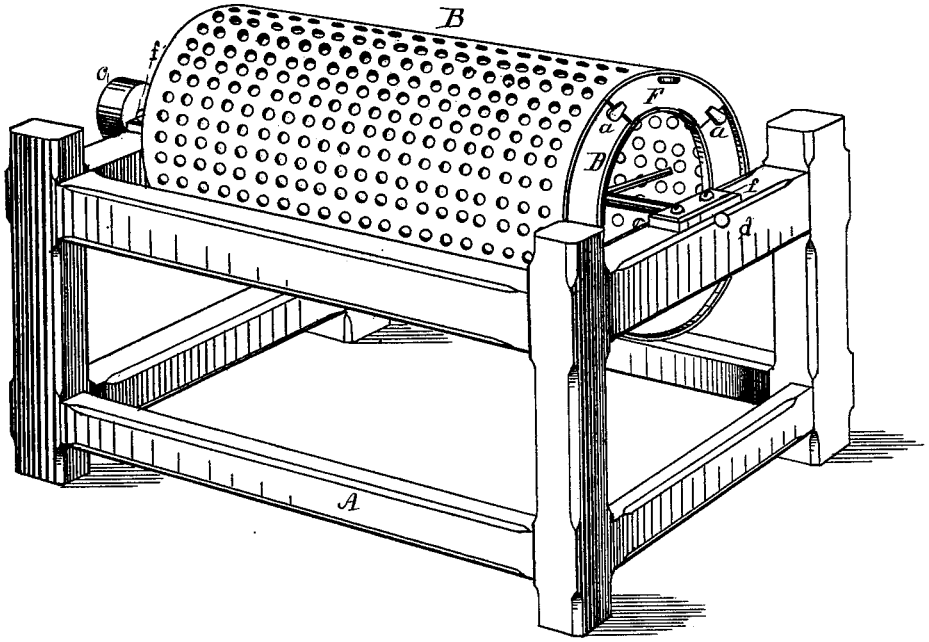

Fig. 1.

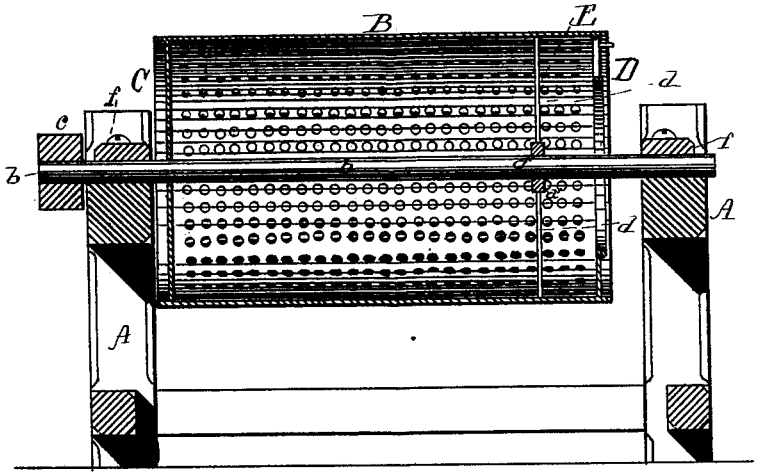

Fig. 2.

WITNESSES

A. Coapt

Bill. Wooster.

INVENTOR

Nathan Goddard

by his Attorneys

J. L. Newton

UNITED STATES PATENT OFFICE.

NATHAN GODDARD, OF FRAMINGHAM, MASSACHUSETTS.

IMPROVEMENT IN CLAY-SIFTERS.

Specification forming part of Letters Patent No. **202,717**, dated April 23, 1878; application filed October 20, 1877.

To all whom it may concern:

Be it known that I, NATHAN GODDARD, of Framingham, in the county of Middlesex and State of Massachusetts, have invented an Improved Clay-Sifter, of which the following is a specification:

The invention relates to a device for sifting pulverized clay from pebbles and débris found in clay-beds in preparing the clay for brick-making; and consists of a perforated revolving cylinder mounted on an axle upon a frame, and said cylinder revolves by its axis on said frame, and has one of its ends closed, and at the other end the diaphragm is centrally perforated, having a rim or border attached to the cylinder, and the remaining part open. In said rim or border is a gate, which can be opened or closed, as occasion demands.

In the accompanying drawings, which are made a part of this specification, Figure 1 shows an elevation of the machine and the perforated diaphragm provided with its gate, and Fig. 2 shows a longitudinal section through the cylinder-axle and frame of the machine.

The letters A A, &c., represent the frame, on which revolves a perforated cylinder, B; C, the closed end or disk of the cylinder; D, the centrally-perforated diaphragm at the other end of the cylinder; E, the spider, composed of the spokes *d d*, &c., and hub *d'*; F, a gate in said perforated diaphragm or border, hinged to the edge of the diaphragm, so as to open outward from the periphery of the cylinder's edge, and has fastenings *a a*; *b*, an axle, upon which revolves the cylinder; *c*, a drum, by which power is applied to revolve the cylinder; *d d*, &c., spokes, and *d'*, hub of the spider E, and are attached to the inner surface of the cylinder; and *f f* are boxes keeping the axle in place.

Clay-beds often have mixed with the clay pebbles, coarse gravel, and other débris, and the same must be sifted from the clay before it can be worked over into bricks. I first plow up and pulverize and dry the clay. I then shovel the mass into the open end of the cylinder, setting the cylinder in motion, and the revolution of the same causes the clay to be sifted through the perforations in the cylinder, while the pebbles and débris are retained within the cylinder.

To remove said pebbles and débris from the cylinder, I have made a gate, F, which is hinged to the inner edge of the diaphragm D, having suitable fastenings, as *a a*, to keep the gate closed when the machine is in operation; and I have found a gate thus formed and placed the best from which to expel the pebbles and débris.

The end or disk C of the cylinder is closed, the axle passing through the center of the cylinder, and carrying the same. I have also placed the spider E near the diaphragm D, to give strength and stability to the cylinder.

I am well aware that revolving screens for certain purposes have been used heretofore, and therefore I do not claim, broadly, a revolving perforated cylinder; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of a perforated revolving cylinder, mounted upon its axis by means of the disk C and the spider E, with the centrally-perforated diaphragm D, which is provided with a gate, F, at its margin, substantially as shown, and for the purpose described.

NATHAN GODDARD.

Witnesses:

JOHN L. LINCOLN,

MARIA B. LINCOLN.