

T. E. CHANDLER & F. TAYLOR.

Tile-Machines.

No. 158,570.

Patented Jan. 12, 1875.

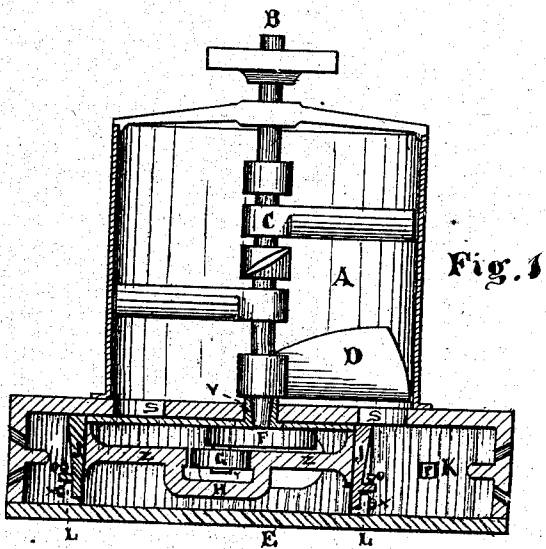


Fig. 1

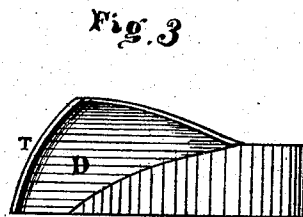


Fig. 3

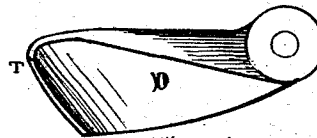


Fig. 4

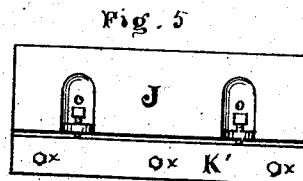


Fig. 5

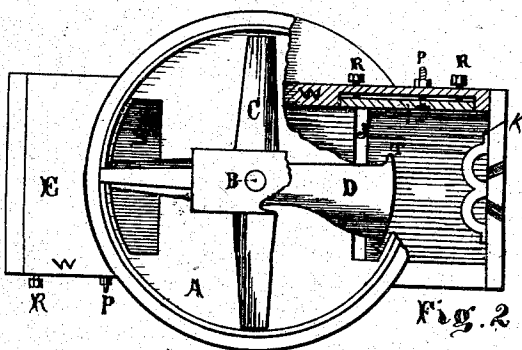


Fig. 2

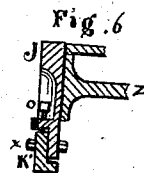


Fig. 6

Witnesses;

Horace H. Brown  
John H. Smith

Inventors.

Thomas E. Chandler  
Franklin Taylor

# UNITED STATES PATENT OFFICE.

THOMAS E. CHANDLER AND FRANKLIN TAYLOR, OF INDIANAPOLIS, IND.

## IMPROVEMENT IN TILE-MACHINES.

Specification forming part of Letters Patent No. **158,570**, dated January 12, 1875; application filed October 20, 1874.

*To all whom it may concern:*

Be it known that we, THOMAS E. CHANDLER and FRANKLIN TAYLOR, of Indianapolis, county of Marion and State of Indiana, have invented an Improvement in Tile-Machines, of which the following is a specification:

The object of our invention is to improve the devices used in tempering clay and molding it into tiles; and it consists in the construction and arrangement of the different parts of the machine, as hereinafter described.

Figure 1 represents a vertical section of our improved tile-machine. Fig. 2 represents a plan and partial section of the same. Figs. 3 and 4 represent a side and bottom view of the inclined feed-wing. Figs. 5 and 6 represent a front and sectional view of the plunger-head and packing-plate.

A represents a cylindrical case, secured on the top of the piston or pressure box E, and has a shaft, B, passing through the center of the case, and through a box, V, into the pressure-box E. The box V is constructed of two pieces, and has a conical-shaped exterior, which fits into a conical hole in the top of the pressure-box E, and is held in its proper position by bolts passing through the flange on the lower side of the box, and through the top of the pressure-box. This box V is so constructed that as the box or journal on the shaft B becomes worn, it can be taken out and a new one substituted; otherwise the hole in the top of the pressure-box E would have to be bushed or have a new top. On the lower end of the shaft B is a crank-plate, F, which has a roller, G, on the crank-pin Y. This roller works in the recess H of the double-headed piston Z. On each end of the piston Z the adjustable heads J and J are bolted. These heads are provided with an adjustable plate, K', which is bolted onto the lower front faces of the heads J and J, the bolts X passing through slotted holes in the adjustable plates K' K'. Immediately above the plates K' K', and cast on the heads J J, are two or more lugs, through which the

adjustable screws O O are inserted, for the purpose of holding the adjustable plates K' K' in their proper position before the bolts X are made fast. The screws O O, when screwed down, lift the heads J and J, and close up any openings that may have been worn at the top or bottom of the pressure-box E. On the side of the pressure-box E (represented at W W) are recesses formed in the sides for the reception of the packing-plates K. These plates are held in the recess by the bolts P P, and each plate K can be adjusted by loosening the nuts on the bolts P P and adjusting the set-screws R R. This arrangement keeps the ends of the pistons J J packed on each side.

The operation of our improved machine is as follows: As the shaft B is revolved, the arms C mix the clay, and the feed-wing D, by its inclined position and curved end T, forces the clay into the chambers of the pressure-box E at each end of the piston-heads J and J, through the openings S S alternately, and as the pistons move forward at each end, the clay is compressed and forced out through the dies at each end.

We do not claim, broadly, the feed-wing D, as that is old.

What we claim as new, and desire to secure by Letters Patent, is—

The pressure-box E, provided with packing-plates K K, the piston Z, having the recess H, and provided with piston-heads J J, with adjustable packing-plates K' K', in combination with the operating mechanism, consisting of the shaft B, crank F, and roller G, as and for the purpose specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS E. CHANDLER.  
FRANKLIN TAYLOR.

Witnesses:

HORACE F. BROWN,  
JOHN W. SMITHER.