2 Sheets—Sheet 1.

B. P. PERRY.

TILE-MACHINE.

No. 192,128. Patented June 19, 1877

Fig 1

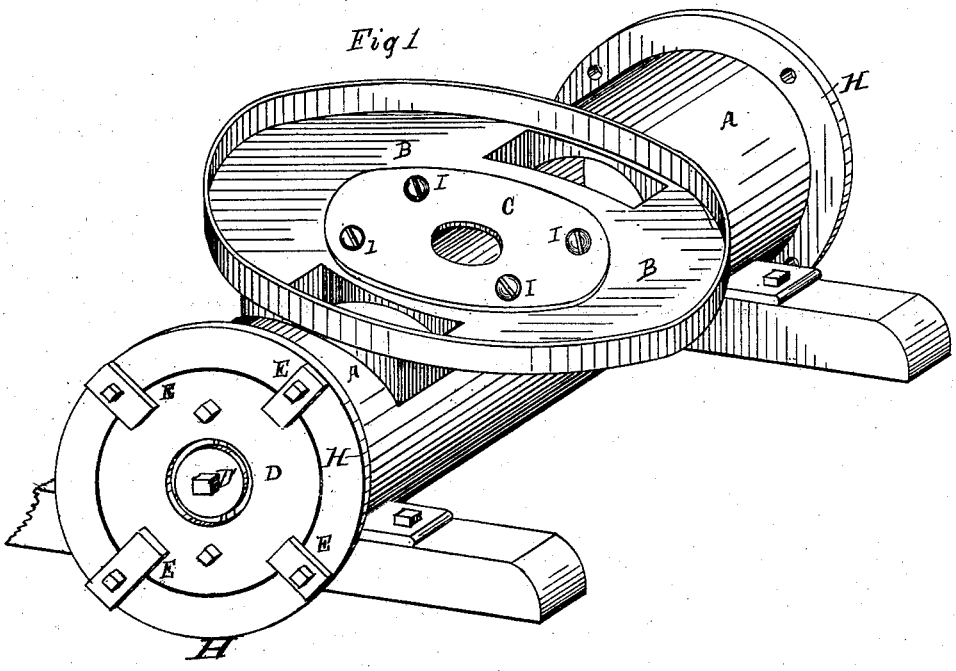
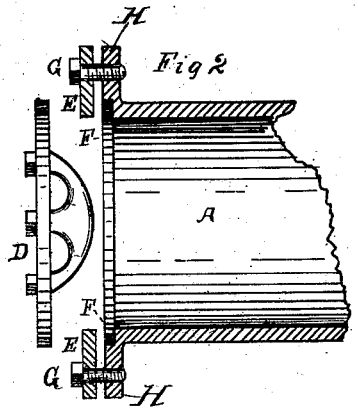


Fig 2



ATTEST:
C. L. Shutz
E. R. Matthews

INVENTOR:
Benjamin P. Perry
By T. B. Hamph & Co.
Attys

2 Sheets—Sheet 2.

B. P. PERRY.

TILE-MACHINE.

No. 192,128. Patented June 19, 1877.

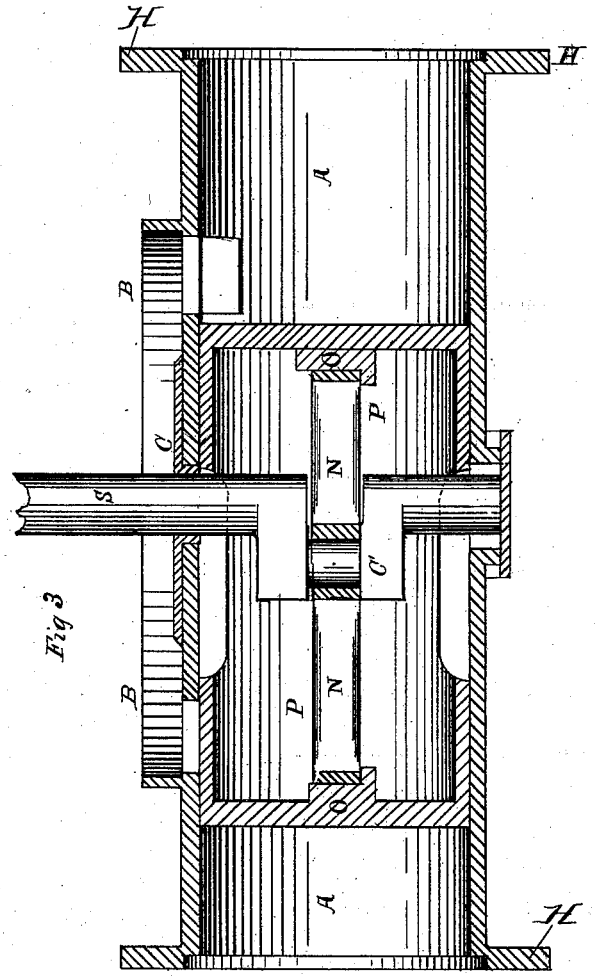


Fig 3

ATTEST:

C. L. Smith

E. R. Matthews

INVENTOR:

Benjamin P. Perry

By F. B. Munn & Co.

Attys

UNITED STATES PATENT OFFICE.

BENJAMIN P. PERRY, OF RICHMOND, INDIANA.

IMPROVEMENT IN TILE-MACHINES.

Specification forming part of Letters Patent No. **192,128**, dated June 19, 1877; application filed September 7, 1876.

To all whom it may concern:

Be it known that I, BENJAMIN P. PERRY, of Richmond, county of Wayne, and State of Indiana, have invented certain Improvements in Tile-Mills, of which the following is a specification:

My invention relates to an improved tile-mill, wherein I use a mud or plunger chamber of cylindrical form, and having the base of the grinding or pug mill cast thereto, the cylindrical plunger-chamber being bored out, and having a plunger turned and snugly fitted therein, and being constructed and arranged in such a manner that the die forms the head of the cylindrical mud or plunger chamber, as hereinafter more fully described.

Figure 1 is a perspective view of the cylindrical mud or plunger chamber with the base of the grinding-mill attached, also showing the die in place. Fig. 2 is a longitudinal vertical section of the cylindrical plunger-chamber, and showing the recess for the die and the die detached therefrom. Fig. 3 is a longitudinal vertical section of the cylindrical plunger-chamber, showing the plunger in place.

A is the plunger-chamber; B, the base of the grinding-mill cast thereto. C is a cap or plate, detachable to allow the crank C′ of the upright driving-shaft S to pass down into the chamber, when the plate C is held in place by means of the screws I I I I.

The grinding-mill is of any usual form of construction. The plunger-chamber, being of cylindrical form, is much stronger than any other form can be, and has the base of the pug-mill and the flanges H H cast thereto. The screws G pass into the flanges H to hold the die D in place in the recess F. The plunger-chamber is cheaply fitted up by being bored out and having a reciprocating plunger turned and fitted thereto, thus combining cheapness of construction with great strength and durability.

A distinctive feature of this machine is the manner of attaching the die D, which is placed in the recess F in the plunger-chamber and held in place by the buttons E and screws G. The usual manner of constructing this kind of machines is to attach a head or die-holder to the box or mud-chamber, the die being a separate device altogether. But in this case the die itself forms the head of the plunger-chamber, dispensing altogether with the usual head or die-holder. The crank C′ actuates the plunger P through the arms N N, which are pivoted to the heads of the plunger on the inside at *o o*.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The base of the pug-mill cast as an integral part of a cylindrical plunger-chamber, said chamber being bored out, and having a reciprocating plunger turned and fitted thereto, substantially as set forth.

2. In a tile-mill, a cylindrical plunger-chamber, having a reciprocating plunger fitted thereto, and having the base of the pug-mill and the flanges H cast thereto, substantially as set forth.

3. A cylindrical plunger-chamber, having the flanges H cast as an integral part thereof, in combination with the die D, recess F, buttons E, and screws G, entering the flanges to retain the die in place, substantially as set forth.

4. In combination with a cylindrical plunger-chamber, having a reciprocating plunger fitted thereto, the detachable plate C, substantially as and for the purpose specified.

BENJAMIN P. PERRY.

Witnesses:
NELSON A. HUNT,
C. L. SHUTZ.