W. MENDHAM.

Brick-Making Machinery.

No. 207,293. Patented Aug. 20, 1878.

Fig 1.

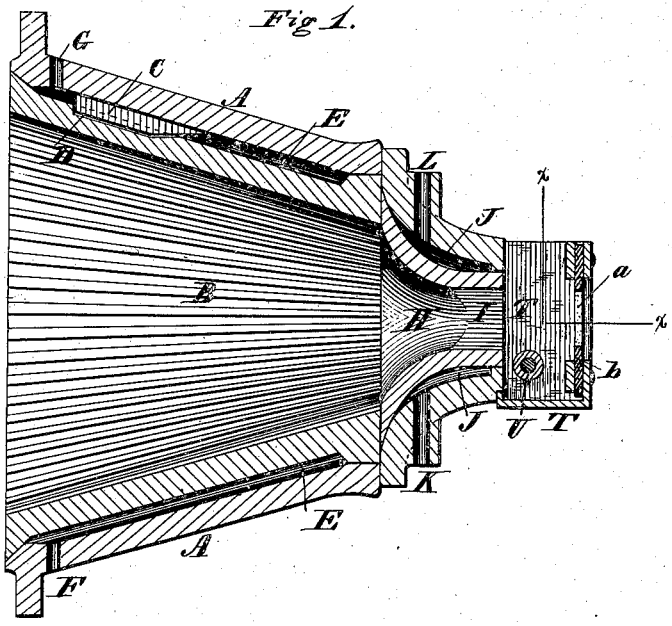


Fig 2.

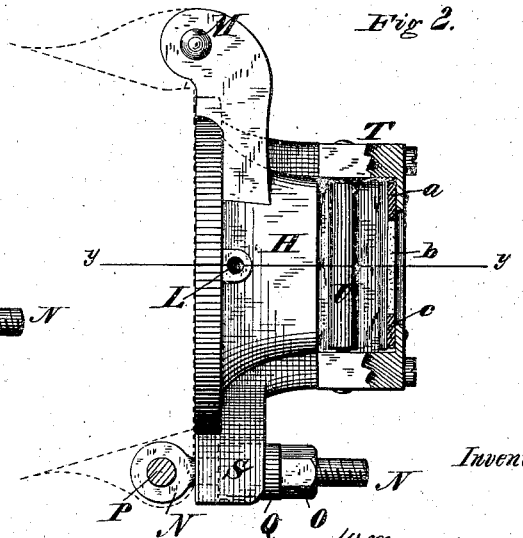
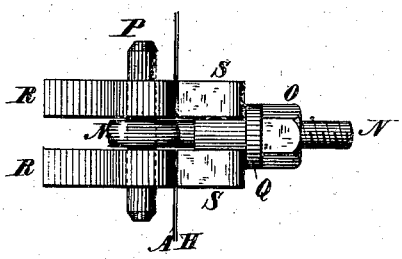


Fig 3.



Witnesses.

Harry King

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UNITED STATES PATENT OFFICE

WILLIAM MENDHAM, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO CYRUS CHAMBERS, JR., OF SAME PLACE.

IMPROVEMENT IN BRICK-MAKING MACHINERY.

Specification forming part of Letters Patent No. **207,293**, dated August 20, 1878; application filed May 13, 1878.

To all whom it may concern:

Be it known that I, WILLIAM MENDHAM, of the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Brick-Making Machinery; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a longitudinal vertical section, on line *y y* of Fig. 2, of the screw-case former and sand-box of a brick-machine, showing my improvements. Fig. 2 is a section, on line *x x* of Fig. 1, of the former and sand-box. Fig. 3 is a side elevation of the swinging bolt for locking the former to the screw-case.

The same part is marked by the same letter wherever it occurs in the several figures.

My improvements relate to that class of brick-machines in which the clay is pugged in a tempering-case, driven out in a continuous bar through a former and die, and cut by a proper severing device into suitable lengths for bricks. They are especially adapted to such a machine as that patented September 15, 1863, by Cyrus Chambers, Jr., and numbered 39,884, provided with the steam-jacket screw-case patented by said Chambers November 1, 1870, and numbered 108,880.

My improvements consist, first, in making the interior of the steam-jacket screw-case loose and removable from the main casting or shell, so that the corrugated lining, which is subjected to heavy wear, may be renewed as often as may be required without the necessity of renewing the whole case; second, in placing on the outer end of the die, whence the bar of clay issues, a sanding-box provided with scrapers, through which the bar passes and is sanded on its way to the severing mechanism.

In the drawings, A marks the outer shell of the screw-case, and B the corrugated lining, which is made in a separate casting from the shell and inserted in it, as shown, and prevented from turning in the case by the feather C projecting from the inner side of the case into a recess, D, in the outer side of the lining.

Between the shell A and the lining B is a steam-space, E, provided with the inlet and exhaust ports F G, through which steam may be received and discharged.

The former H, which conducts the clay to the die I, is also provided with a steam-space, J, and with inlet-port K and exhaust-port L. The former is hinged to the screw-case at M, Fig. 2, and is locked on the opposite side by the swinging bolt N, provided with the nut O and slider Q, and held to the case A by a pintle, P, passing through eyes R projecting from the case. The slide Q enters between lugs S, projecting from the former, as shown, and is clamped by the nut O.

In front of the former and die is attached the sand-box, through which the bar of clay passes at it emerges from the machine The box is supplied with sand from any suitable hopper or reservoir. Near the bottom of the box is placed a roller, U, covered with felt, which applies the sand to the bottom of the bar.

In the front of the box is an oblong rectangular opening, larger than the cross-section of the clay bar. Around this opening, and projecting into it so as to touch the bar on all sides, I place elastic scrapers *a b c*, formed of rubber or leather, preferably the former, sufficiently stiff to hold back all the sand except that which adheres to the surface of the clay.

The roller U presses the sand into the body of the clay and imparts a sanded surface to the brick closely resembling that of a hand-made brick. If thought desirable, such rollers may be placed on all sides of the bar.

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

1. The screw-case lining B, made in a separate casting from the shell of the case, and inserted in it, so as to be removable for renewal when worn, as described.

2. The sand-box T, provided with the elastic scrapers *a b c*, arranged and operating as set forth.

3. In combination with the sand-box T, the roller U, for applying sand to the surface of the clay bar, as specified.

In testimony that I claim the foregoing as my own invention I hereto affix my signature in presence of two witnesses.

WILLIAM MENDHAM.

Witnesses:
J. HOWARD CHAMBERS,
S. BERNARD CHAMBERS.