

D. B. RICH & C. D. HUBBARD.
Improvement in Brick Machines.

No. 124,761.

Patented March 19, 1872.

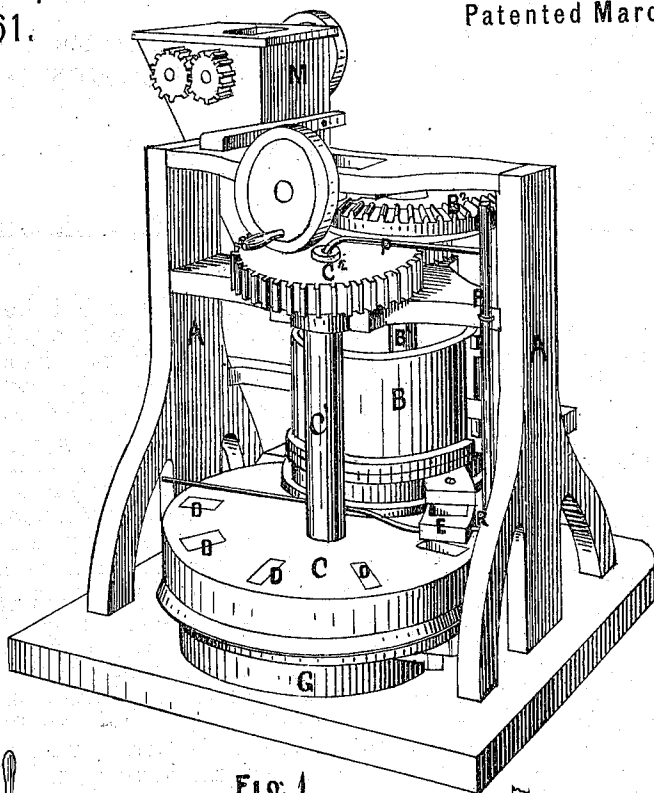


Fig. 1

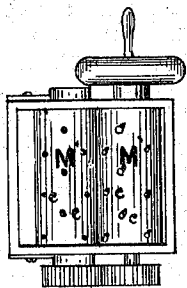


Fig. 3

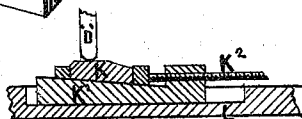


Fig. 4

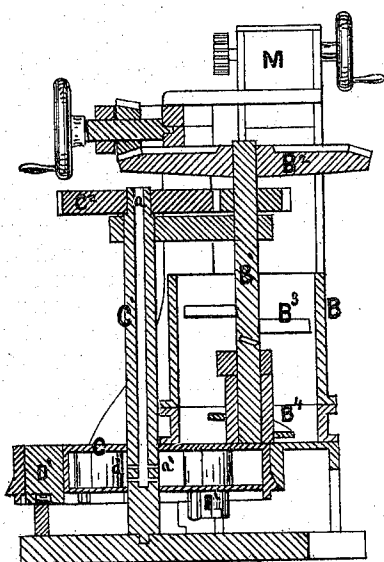


Fig. 2

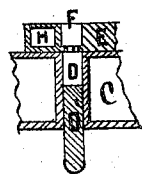


Fig. 5

WITNESSES

Frank G. Parker
Frank H. Ritter

INVENTORS

Dwight B. Rich
Charles D. Hubbard
William H. Mason

UNITED STATES PATENT OFFICE.

DWIGHT B. RICH AND CHARLES D. HUBBARD, OF CAMBRIDGE, ASSIGNORS
TO THE NEW ENGLAND BRICK COMPANY, OF BOSTON, MASS.

IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. 124,761, dated March 19, 1872; antedated March 2, 1872.

To all whom it may concern:

We, DWIGHT B. RICH, of Boston, county of Suffolk and State of Massachusetts, and CHARLES D. HUBBARD, of Cambridge, county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Brick-Machines, of which the following is a specification:

The Nature of the Invention.

The nature of our invention consists in certain improvements made upon the invention secured to E. P. H. Capron by Letters Patent of the United States dated May 8, 1866, and numbered 54,500. The principal feature of our invention consists in combining with the molding or forming part of the machinery of the Capron mill a system of steam-chambers, by means of which the surfaces which are in contact with the brick are kept hot, the object being to prevent adhesion of the clay. Our invention also embraces some mechanical devices which can be best understood by reference to the drawing and specification.

Description of the Accompanying Drawing.

Figure 1 is a perspective view showing our invention. Fig. 2 is a vertical section of the same. Fig. 3 is a plan showing the crushing-mill. Fig. 4 is a section showing the device for regulating the pressure on the brick. Fig. 5 is a section showing a part of the mold-wheel and the device for smoothing the upper edge of the brick.

General Description.

A A represent a frame, to which the parts of the machine are attached. M, Figs. 1, 2, and 3, is a mill for crushing the clay as it comes from the pit. The rollers M' M' are provided with bosses and depressions *c c c*, to facilitate the drawing in of the lumps of clay. The pug-mill B consists of a revolving shaft, B¹, which has upon it arms B³, for beating up the clay. B⁴ is a propeller-shaped flange, which serves to drive the clay down, and to force it into the mold D in the wheel C. The wheel C, with its molds D D, followers D' D', and way G, is made and operates as described in Letters Patent granted to Capron; above re-

ferred to, except that it is hollow, that it has within it a steam-chamber, which surrounds all of the molds. Into this chamber the steam is admitted through the hollow shaft C', Fig. 2, the steam being supplied by the pipe P, Fig. 1. E, Figs. 1 and 5, is a plate made as shown in section in Fig. 5, with a sinkage, F, the bottom of which is perforated, as shown. The object of these perforations is to allow any surplus clay that may be in the mold to be pressed out, as the greatest pressure takes place at the time when the mold is exactly under the part F of the plate E. The plate E is also hollow, as shown at H, Fig. 5, so that steam may be admitted to it through the pipe R. The followers D', Figs. 2 and 5, are held up so that the upper ends are kept even with face of the mold-wheel C, until they arrive at a point near the pug-mill, then they drop so as to leave the mold open and of a depth somewhat in excess of the width of the brick. As they pass under the propeller of the pug-mill they are filled with clay. As they pass out and under the plate E the follower is pressed upward by the wedge K, Fig. 4; this compresses the brick to its true size, the surplus clay being forced through the openings in the sinkage F, Fig. 5. To adjust the wedge K so as to raise the follower D' to the proper height for compressing the brick, we place it upon an incline, K¹, said incline being adjustable longitudinally by the screw K², so that as the incline is moved backward and forward the wedge K is lowered or raised.

We claim as our invention—

1. The arrangement of the vertical molds D D in a hollow vertical steam-drum, C, said steam-drum being provided with steam, and operating with the plunger D and top plate E, substantially as described, and for the purpose set forth.

2. The top plate E made with the steam-chamber H and perforated sinkage F, substantially as described, and for the purpose set forth.

DWIGHT B. RICH.

CHARLES D. HUBBARD.

Witnesses:

WILLIAM EDSON,
FRANK H. NUTTER.