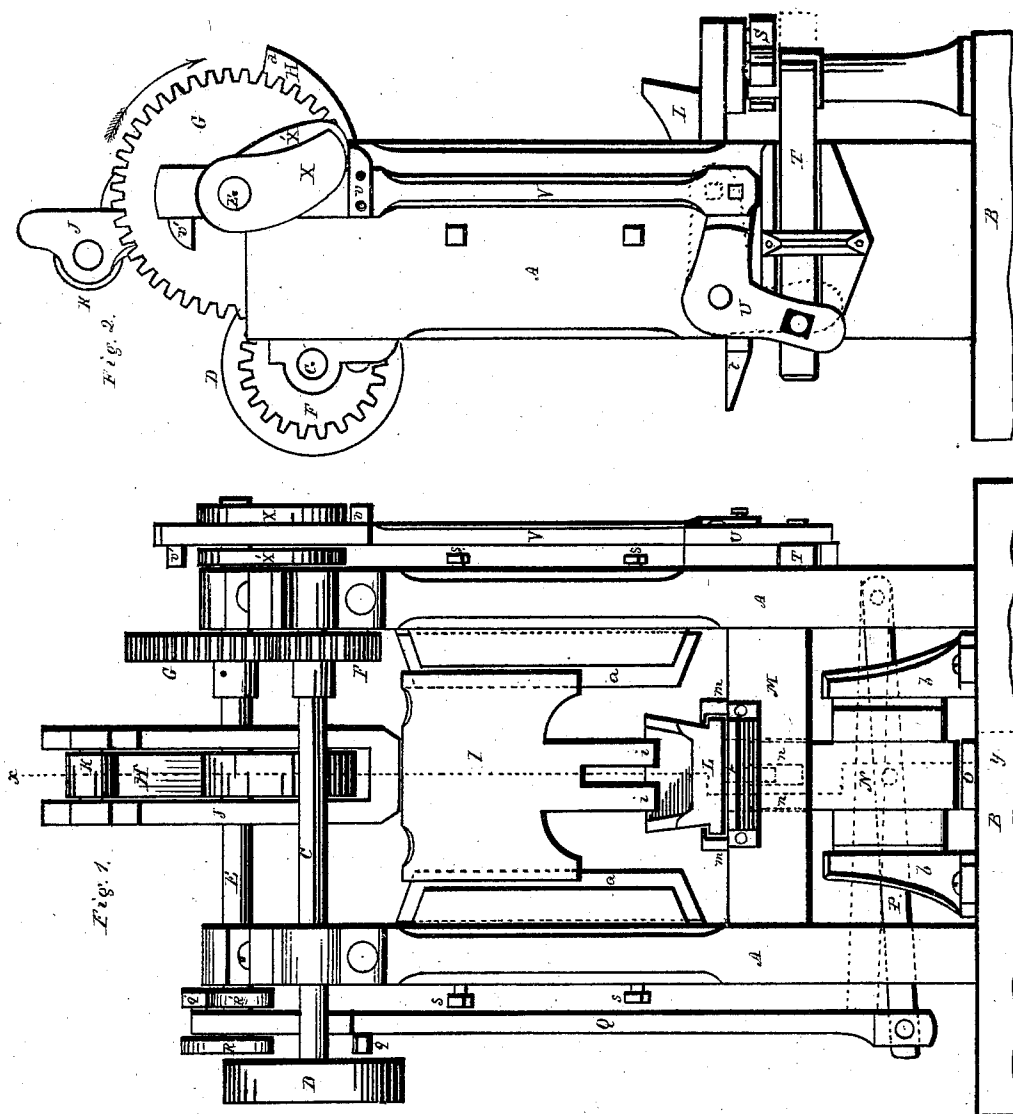


**R. T. BARTON.**  
**Brick-Machines.**

No. 151,074.

Patented May 19, 1874.



 Witnesses.

Bensleeve.

Charles L. Burdett

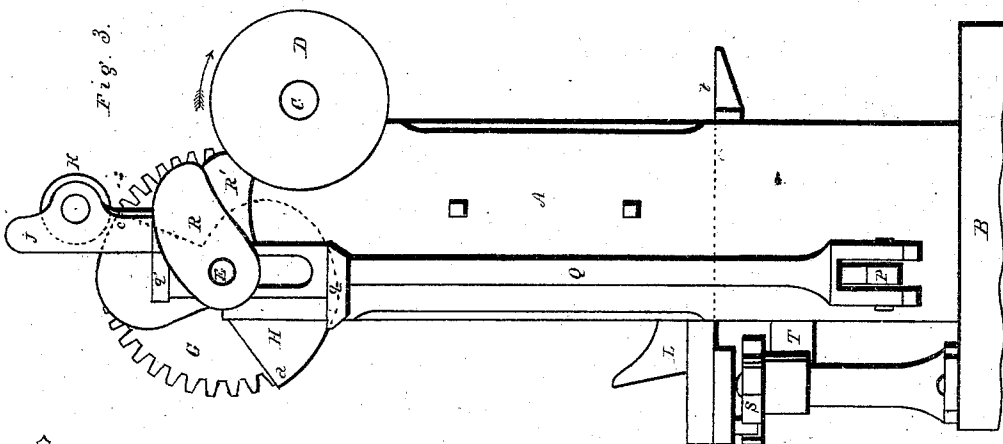
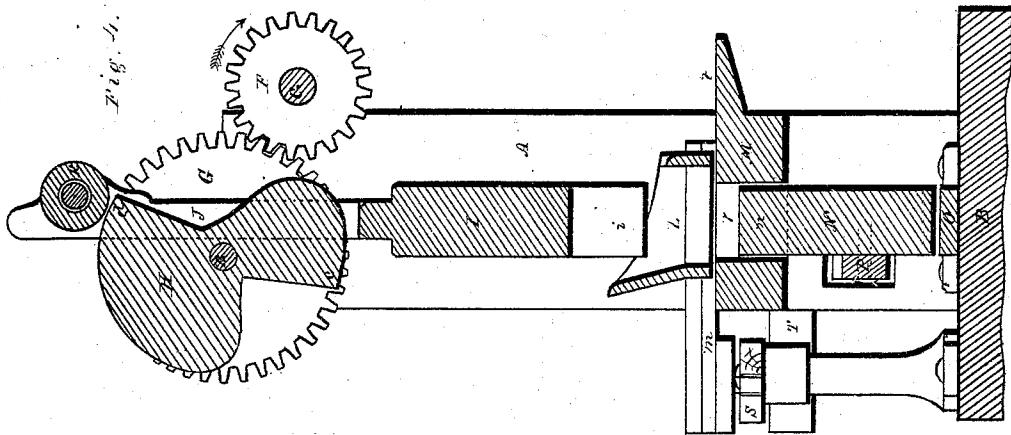
**Inventor.**

Richard T. Barton  
 & Theo. G. Ellis  
 attorneys.

R. T. BARTON.  
Brick-Machines.

No. 151,074.

Patented May 19, 1874.



**Witnesses.**

*Benderson*

*Charles L. Burdett*

**Inventor.**

*Richard T. Barton*

*& Jno. G. Ellis*

*Attorneys*

# UNITED STATES PATENT OFFICE.

RICHARD T. BARTON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO SIMEON C. HOOKER, OF SAME PLACE.

## IMPROVEMENT IN BRICK-MACHINES.

Specification forming part of Letters Patent No. **151,074**, dated May 19, 1874; application filed November 11, 1872.

*To all whom it may concern:*

Be it known that I, RICHARD T. BARTON, of New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Machines for Making Brick; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

The object of my invention is to provide a machine which shall be simple and strong, less liable to get out of order, and at the same time make a better, harder, smoother, and squarer brick than the machines now in use for the same purpose. My invention consists in the construction and arrangement of the several parts of the machine to accomplish the objects above set forth.

In the accompanying drawings, on two sheets, Figure 1 shows a front elevation of my improved machine. Fig. 2 is a side view with the front of the machine to the left. Fig. 3 is a side view with the front of the machine to the right. Fig. 4 is a section through the working parts of the machine on the line *x y*, Fig. 1.

A is the frame of the machine, resting upon the solid base or support B. C is the driving-shaft, receiving its motion from the pulley D. E is the main working shaft of the machine, receiving its motion from the shaft C by means of the gear-wheels F G. It revolves in the direction of the arrow in Fig. 2. H is a large cam for raising and dropping the weight I. It is keyed to E, and revolves with it. J is a vertical link, connecting the weight I with the roller K, which runs on the cam H. The weight or drop I has two rectangular projections, *i i*, upon its lower end for stamping and pressing the brick. It moves up and down upon the slides *a a*, which are connected with the frame A, and are adjustable laterally by means of the screws *s*. L is a sliding hopper, moving forward and backward in slides *m*, attached to the top of the solid mold-block M,

which forms part of the frame of the machine. The hopper L moves back and forth between the positions shown in Figs. 3 and 4. In front of the mold-block M is a projection, *t*, forming a table, on which the finished brick are deposited by the action of the machine. It also has two rectangular apertures running through it from top to bottom, into which the projections *i* fit. N is an anvil-block for forming the bottoms of the bricks when they are struck by the weight I. It has two rectangular projections, *n n*, which fit into the apertures *r* of the mold-block. It also has a motion up and down on the slides *b b*. O is a bed-block, upon which the anvil N rests when the bricks are struck. The anvil-block N is moved up and down at the proper time by means of the lever P and the connecting-rod Q, operated by cams upon the shaft E. The cam R operates upon the stop *q* and pushes it down, and the cam R' operates upon the stop *q'* to raise it, as will be seen in Figs. 1 and 3. The hopper L is moved back and forth at the proper times by cams at the opposite end of the shaft E, by means of the rocking lever S, the connecting-rod T, the bell-crank U, and the connecting-rod V. The cam X operates upon the stop *v* to push it down and draw back the hopper, and the cam X' operates upon the stop *v'* to raise it and push the hopper forward, as will be readily seen in Figs. 1 and 2.

The operation of my invention is as follows: Previous to starting, the position of the weight is adjusted by means of the screws *s*, so that the projections *i* will enter accurately into the recesses *r* when the weight drops. The machine is started and runs continuously. While the hopper is in its rearward position, as shown in Figs. 1, 2, and 3, it is filled with the material of which the brick is to be made. While it is in this position the weight drops off the point *c* of the cam to finish a previous brick. After the weight again rises the hopper moves forward under the drop, and the weight falls off from the point *d* of the cam H, as shown in Fig. 4. The projections *i* press the material down into the recesses or molds *r*. The weight then rises and the hopper recedes to its former position. When the cam H has made about half a revolution, the weight

again drops and finishes the brick which has remained in the mold *r*. As the weight again rises, it is followed upward by the anvil-block N, whose projections *n* push the molded brick out of their recesses up to the level of the table *t*, so that when the hopper again moves forward with the new material, they are pushed by it forward upon the table *t*, ready to be removed. The anvil-block N descends as the hopper finishes its forward movement, so as to form the recess or mold *r* before the weight I drops.

The machine as herein described makes two bricks at a time; but any convenient number

can be made at the same time by having more or less molds, according to the size and power of the machine.

What I claim as my invention is—

1. The combination of the devices P, Q, R, and R', for operating the anvil-block N at the proper time, substantially as described.

2. The combination of the devices S, T, U, V, X, and X', for operating the hopper L at the proper time, substantially as herein described.

Witnesses:

THEO G. ELLIS,  
BEN. A. COOKE.

R. T. BARTON.