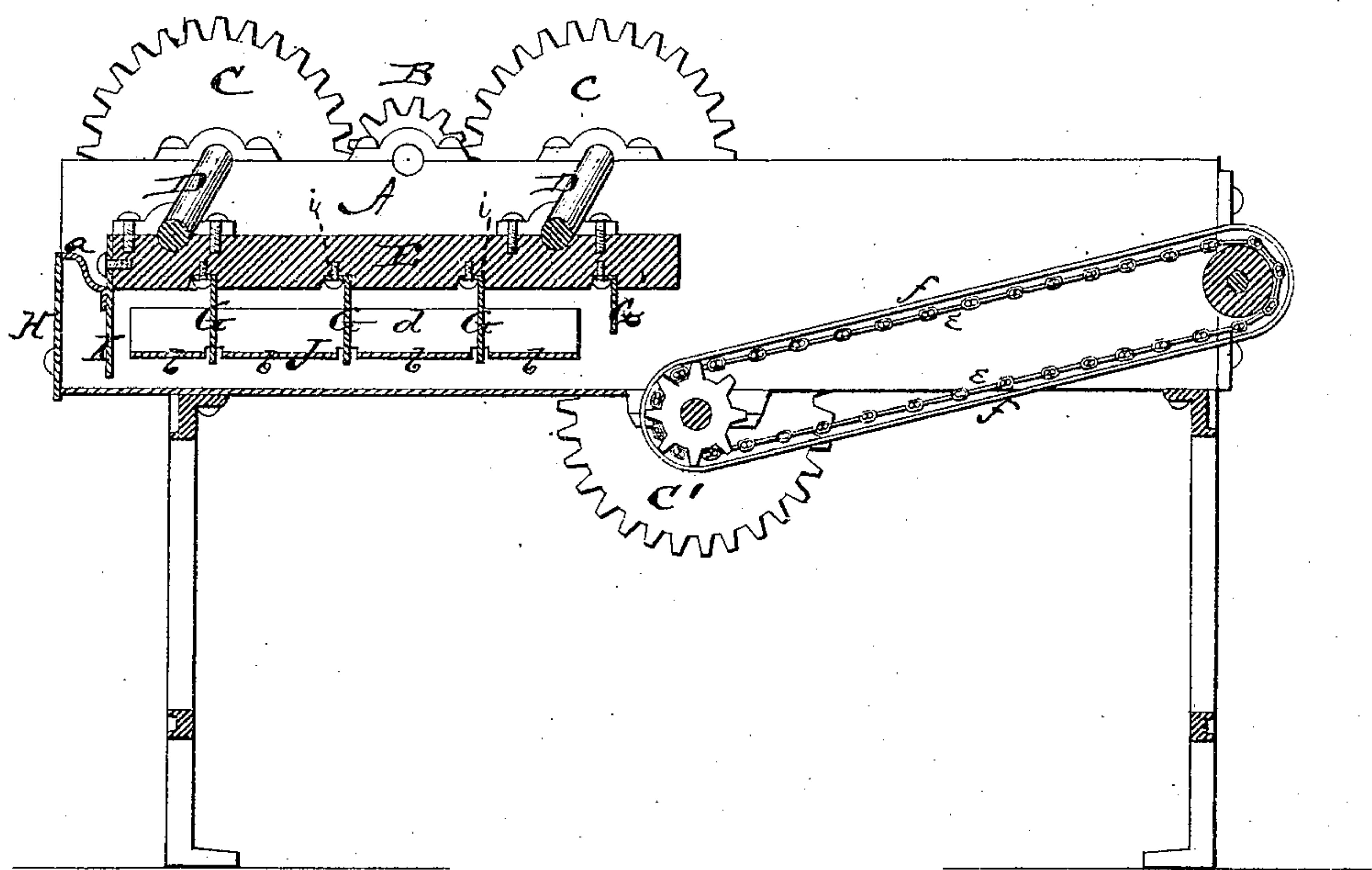


G. BALDWIN.

Brick and Tile Machines.

No. 136,481.

Patented March 4, 1873.



Witnesses
John A. Ellis.
Wm. T. Ellis

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UNITED STATES PATENT OFFICE.

GOODRICH BALDWIN, OF MONROE, MICHIGAN.

IMPROVEMENT IN BRICK AND TILE MACHINES.

Specification forming part of Letters Patent No. 136,481, dated March 4, 1873.

To all whom it may concern:

Be it known that I, GOODRICH BALDWIN, of Monroe, in the county of Monroe and State of Michigan, have invented certain new and useful Improvements in Brick and Tile Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a brick and tile machine, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a longitudinal vertical section of my machine.

A represents the box in which the clay is moved forward to the die. B is a pinion, which is to be driven by any suitable power connected or attached to a pulley on the pinion-shaft. This pinion gears with two cog-wheels, C C, placed upon two crank-shafts, D D, the cranks of which are within the box A. The cranks D D are thus carried around, and a pitman, E, attached to the cranks rotates horizontally, and in its motion, by means of hoes G G fastened to it, reaches back and takes the clay from the feeding-belt, manipulates it, and carries it forward to the die H, through which it is pushed by the plunger I attached to the front end of the pitman, either into brick or tile, as may be desired, by a change of die.

On the plunger I is a flange, a, constructed as shown, so that it comes over the top of the die H at each revolution, forming a compact box, thereby confining the clay until it has passed through the die, thereby preventing the clay from rising over the top of the die.

Ordinarily the clay would pack between the knives or hoes and not work forward. To prevent this there is a cleaner, J, consisting of flat pieces b b of board or metal attached to

narrow side pieces d d, placed inside of and against the box. Slots in the hoes hold and govern this cleaner, the hoes working in the spaces between the flat pieces b b. When the machine is working the clay presses the cleaner up, and, as the cranks go over, the hoes are drawn up and relieved of all the clay, which falls to the bottom of the machine. The top of the cleaner or side pieces strikes friction-rollers, which hold it at a proper height, so that the hoes are cleaned at every revolution.

The clay is carried into the machine by means of a belt, f, and over a step-chain, e, moved by a suitable spider attached to a roller which is driven by a spur-wheel, C', from one of the wheels C. The hoes G G are fastened to the pitman E by a flange, i, at the top of each hoe with bolts; and, to secure the cutting of the clay, at the bottom of the hoes are stubs or fingers at right angles to the hoes which cut the clay.

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

1. The pitman E, carrying the hoes G G and plunger I, and operated by means of the two cranks D D, substantially as and for the purposes herein set forth.
2. The flange a, attached to or formed on the plunger I, and operating, in connection with the die H, substantially as and for the purposes herein set forth.
3. The cleaner J, consisting of the bottom pieces b b and side pieces d d, and operating, in connection with the hoes G G and the friction-rollers described, substantially as and for the purposes herein set forth.
4. The combination of the cranks D D, pitman E, hoes G G, plunger I with flange a, die H, cleaner J, belt f, and step-chain e, all substantially as and for the purposes herein set forth.

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

GOODRICH BALDWIN.

Witnesses:

LEWIS DARRAH,
MICHAEL HENNESSY.