

S. Gissinger.
Brick Machine.

Nº 72015

Patented Dec. 10, 1867.

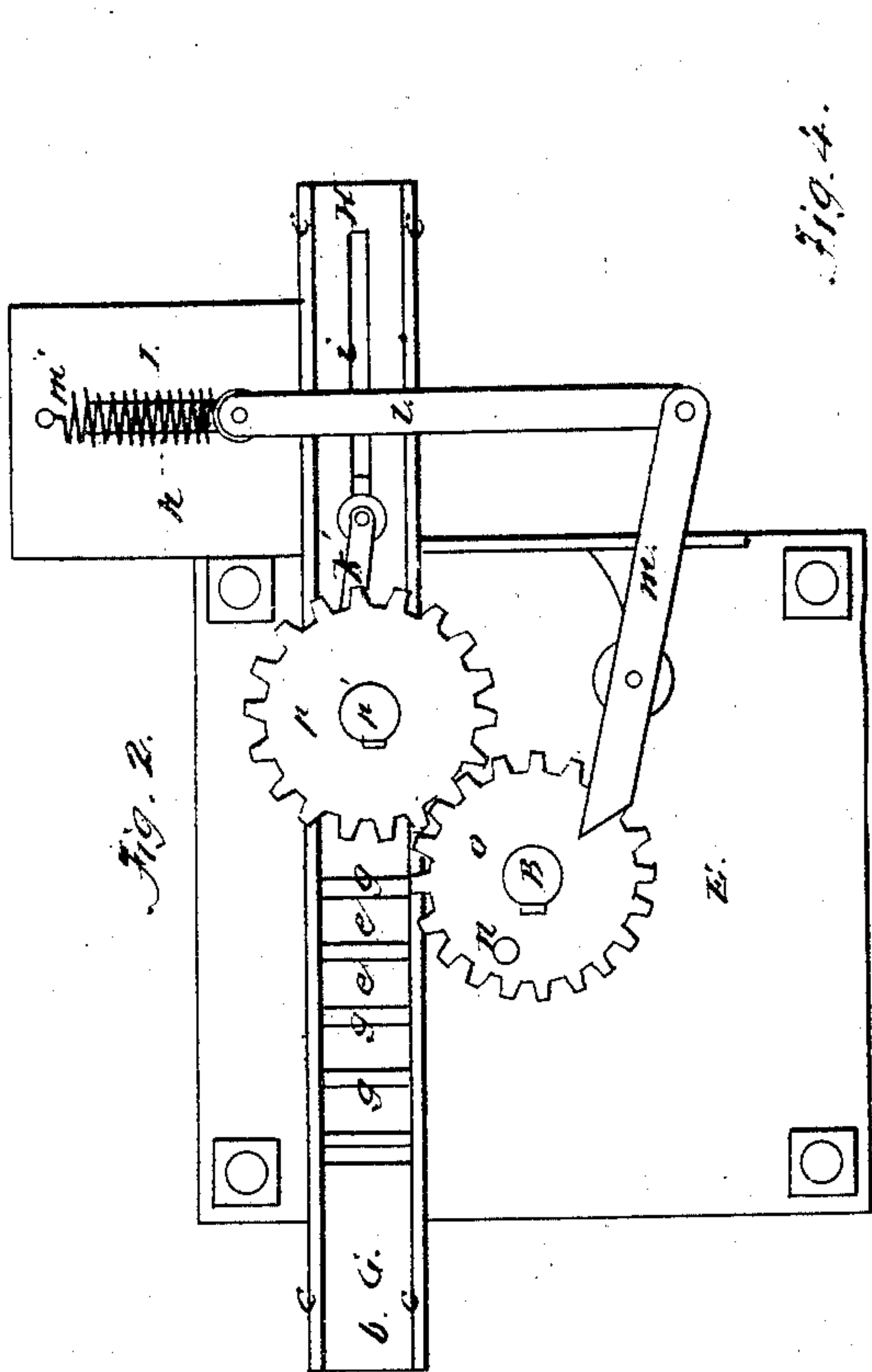


Fig. 2.

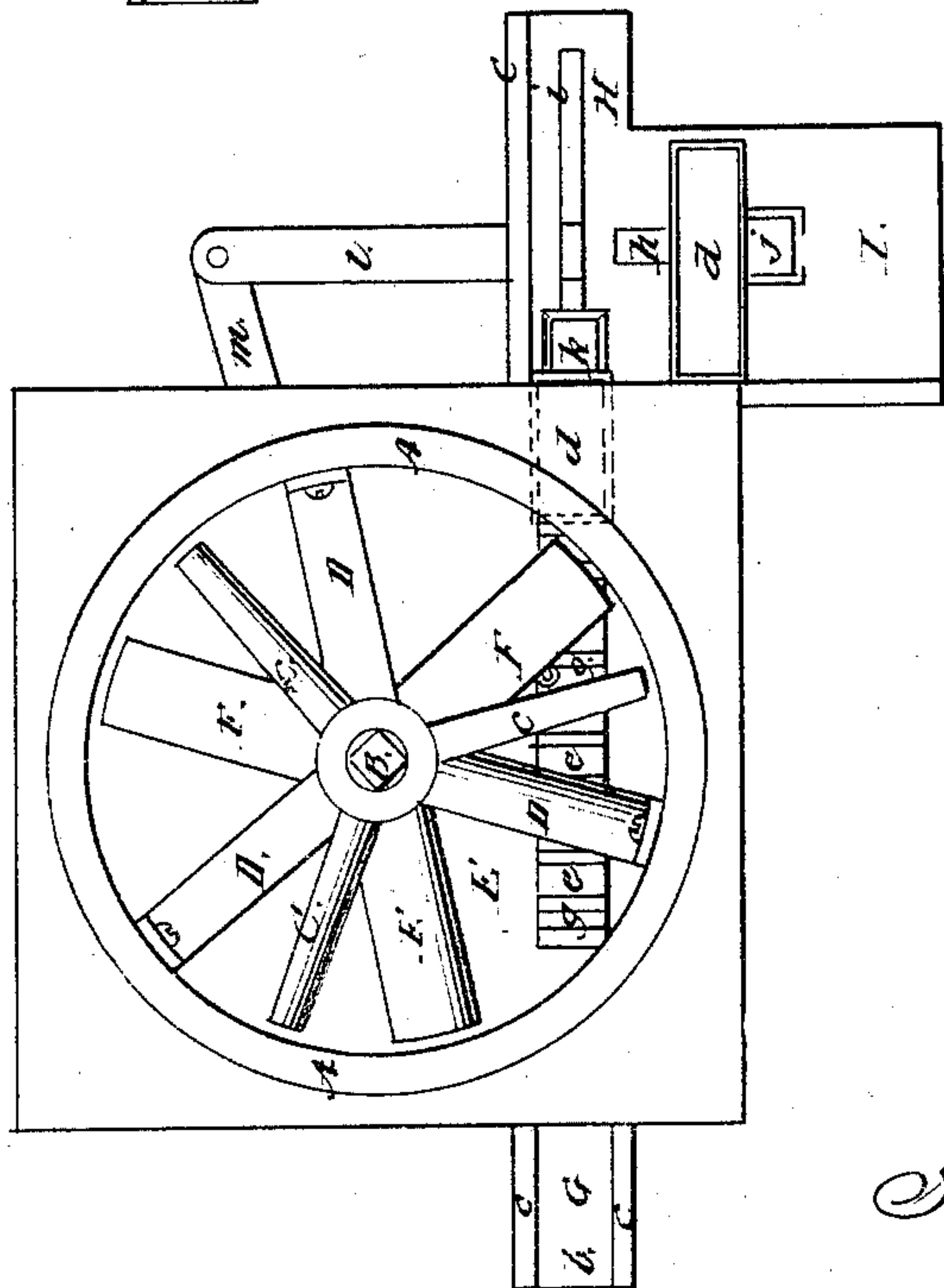
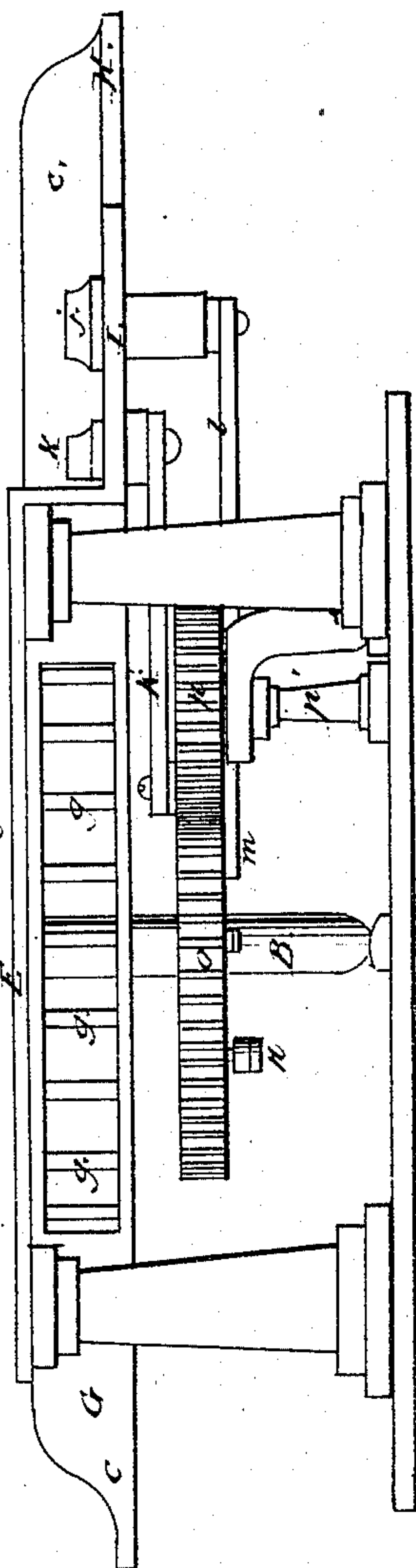


Fig. 1.

Fig. 3.



Witnesses

J. M. Kenney
W. A. M. Kenney

Inventor
Samuel Gissinger

By Wiedersheim
attorney.

United States Patent Office.

SAMUEL GISSINGER, OF ALLEGHENY CITY, PENNSYLVANIA.

Letters Patent No. 72,015, dated December 10, 1867.

IMPROVED BRICK-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL GISSINGER, of Allegheny City, in the county of Allegheny, and State of Pennsylvania, have invented a new and useful Improvement in Brick-Machines; and I do hereby declare the following to be a full and correct description of the same, sufficient to enable others skilled in the art to which my invention appertains to fully understand and construct the same, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 is a plan or top view of my improved brick-machine.

Figure 2 is a bottom view of the same; and

Figure 3 is a side elevation of the same, the hopper and knives not being shown.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of my invention consists in a novel mechanism by means of which the moulds are automatically pushed up to and under the hopper, one by one, to be filled, and are pushed along until they are received at the opposite end of the hopper.

A, in the drawings, may represent the cylindrical hopper, through the centre of which the shaft B passes. This shaft is provided with a set of grinding-knives, C, having a thick rounded back and a thin edge, and set obliquely on the shaft so as to crush the clay between themselves and the stationary knives D, which are secured at one end to the inner side of the hopper, and at the other end to a sleeve on the shaft B, as shown in fig. 4. Between the stationary knives D and the bottom E of the hopper A, is a set of fillers, F, consisting of blades set obliquely on the shaft B, their lower edges passing close over the bottom E of the hopper, which is provided with a square opening, e, which is not quite as wide as the moulds d, so as to prevent the clay which is pressed down in the moulds from scraping down the sand from their sides, which would be the case if the opening e were as wide as the moulds themselves. G' is the roller-way for the moulds, formed under the bottom plate of the hopper, and consisting of the bottom b and the sides c. For a distance under the hopper and under the opening e, the sides and bottom of the roller-way G are exsected, and rollers g placed in the openings, which allow the moulds to pass along more easily than if the bottom were a mere board, and also prevents the roller-way G from being clogged up, any clay falling outside of the moulds being enabled to fall through the openings between the rollers g'. The roller-way G extends on both sides of the hopper, and forms on one end a platform, H, with an extension, I, at right angles with the platform H. Each of these platforms has a slot, h and i, in which blocks j and k move. Block j serves to move the moulds d up to hopper and on to the platform H, and is operated by means of an arm, l, the free end of which is attached to a lever, m, operated by means of a pin, n, on the under side of a gear-wheel, o, on the shaft B. This wheel o gears with another wheel p, on a shaft, p', and gives motion to the block k by means of the crank-arm k', in such manner that whenever the block k is near the farthest end of the slot i, the block j is moved, by means of the pin n on the wheel o and intermediate devices, the length of the slot h, leaving the mould at the point where it is seized by the block k on its return motion. The block j is held in position at the farthest end of the slot h, and is forced to resume this position every time the pin n has operated the lever m, by means of the spring m', attached at one end to the platform I, and at the other to the arm l. The wheels o and p gear in such a manner that the block j will be operated only when the block k is at the farthest end of the slot i, and a mould may be placed in front of the block j therefor, whenever this latter has returned to its normal condition, without regard to the position of the block k. This feature is illustrated in fig. 1. One mould has not yet quite been pushed in by the block k, but another is already in position in front of block j to be operated upon.

It will be easily understood that as the moulds are pushed along by means of each other, their ends will be in continuous close contact with each other and prevent any clay from falling between them, and thus clog up any part of the machinery, and should the person who places the moulds on the platform I, in front of block j, miss one operation of the blocks j, k, without placing a mould, no clay will be wasted, as the moulds already in the roller-way G will remain in place, as the block k only moves as far as the bottom plate E of the hopper.

In brick-machines in which endless belts are used to convey the moulds under the hopper, much trouble is experienced by waste of clay and clogging up of the machinery, when the moulds are not placed with the utmost

care and contiguously on the endless belt, for if the operator should omit to place a mould close to the preceding one, the clay from the hopper will fall between them and on the belt.

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

1. The device for moving the mould on to the roller-way G, consisting of the arm *l*, held by a spring, *m'*, lever *m*, pin *n*, on the gear-wheel *o*, and block *j*, moving in the slot *h*, substantially as described.

2. The device for moving the moulds under the hopper, consisting of the gear-wheel *p*, operated by the gear-wheel *o*, arm *k'*, and block *k*, moving in the slot *i*, substantially as described.

3. In combination with the above, I claim the gear-wheel *o*, shaft B, grinding-knives C, stationary knives D, and fillers F, in the hopper A, substantially as and for the purposes described.

4. The roller-way G, provided with openings and rollers *g* and *g'*, substantially as and for the purposes described.

The above specification of my improvement in brick-machines, signed this 26th day of September, 1867.

S. GISSINGER.

Witnesses:

J. D. STUART,

D. OURAND.