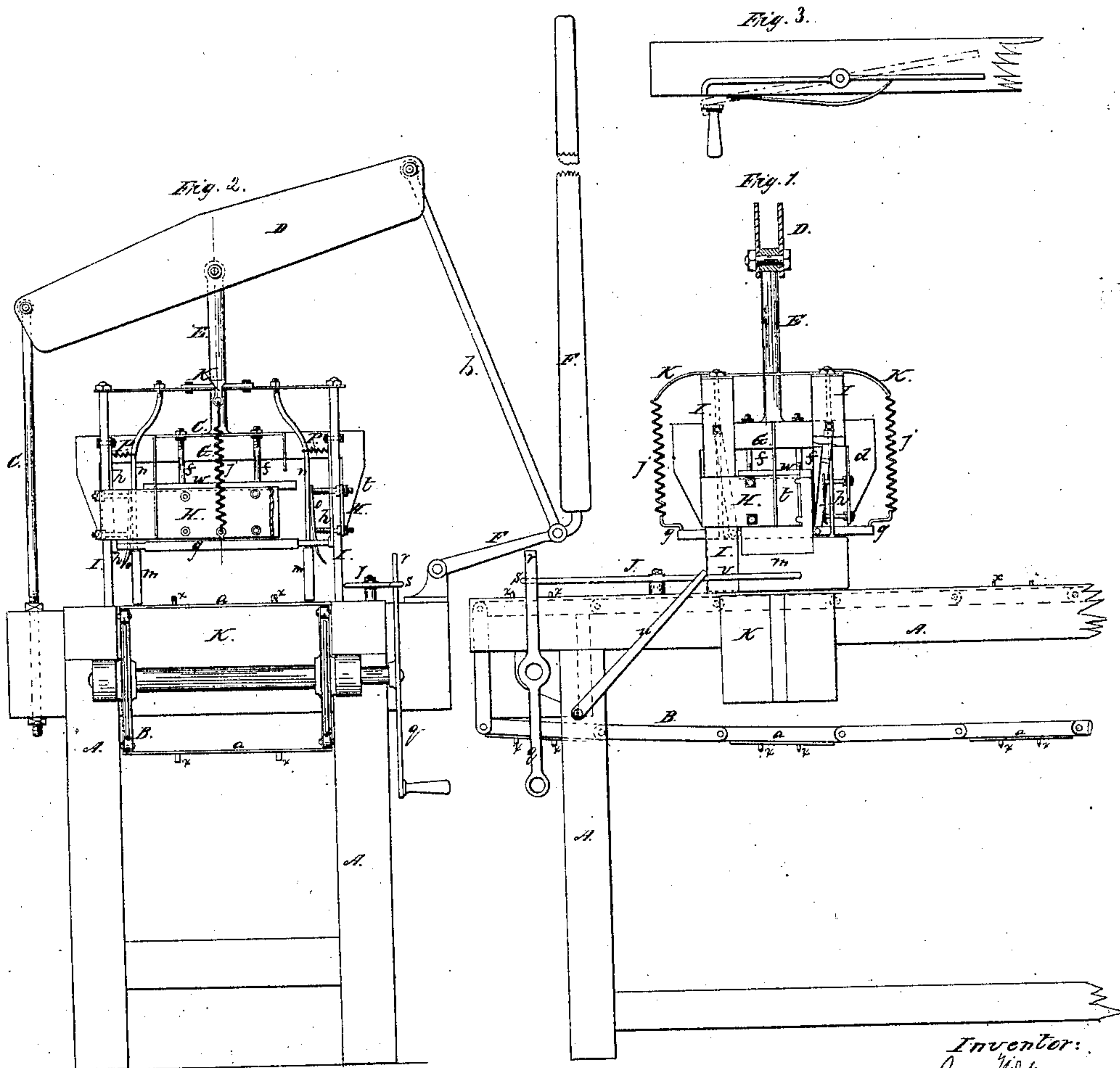


*J. Mc Namara,*

*Brick Machine.*

*N<sup>o</sup> 78,388.*

*Patented May 26, 1868.*



*Witnesses:*  
*Jay Bryant*  
*J. B. Drake*

*Inventor:*  
*James Mc Namara*  
*by J. B. Drake*

# United States Patent Office.

JAMES McNAMARA, OF BUFFALO, ASSIGNOR TO HIMSELF AND C. D. PAGE,  
OF ROCHESTER, NEW YORK.

*Letters Patent No. 78,388, dated May 26, 1868; antedated May 18, 1868.*

## IMPROVED MACHINE FOR DRESSING BRICK.

*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, JAMES McNAMARA, of the city of Buffalo, in the county of Erie, and State of New York, have invented a certain new and improved Machine for Dressing Brick; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is an end elevation.

Figure 3, a fragmentary view, showing a plan of lever J.

Like letters, of reference designate corresponding parts in all the figures.

The nature of my invention consists in subjecting the unfinished brick to a pressure from all sides, by means of the platens or plates, arranged and operated as hereafter specified; and also, in connection therewith, the peculiar device by which the endless carrier for the brick is automatically stopped, when the brick has arrived at the proper position, and released again by the machinery during the operation of dressing the brick.

In the drawings, A A represent a frame of any suitable construction, in the ends of which is mounted an endless belt, B, having plates *a a* secured to it at regular intervals, upon which the bricks are placed. I I are standards, secured to the top of the frame, and connected at their top, forming a frame and guide for the dressing-mechanism. C is a post, to the top of which is joined the end of a lever, D, at the centre of which is connected, in a similar manner, the end of a vertical piston-rod, E. To the front side of the machine are jointed the ends of a bent lever, F, as shown, with a rod, *b*, connecting it and the end of the lever D, by which the piston is actuated. To the lower end of the rod E is attached a sliding frame, G, consisting of a horizontal plate, *c*, cast with or attached to the edge of cross-plates *d d*, the ends of which extend downward, so as to have secured thereto the square or rectangular sleeve H, which surrounds and slides up and down the guides or standards I. Below the plate *c* is a horizontal plate or platen, *w*, for pressing the top of the brick, which is secured to the former by screw-bolts *f f*, so as to be adjusted higher or lower, as may be required. On opposite sides are hinged, at their top, two similar plates, *g g*, the pins or gudgeons resting in the lower end of bearings *h h*, consisting of straps or bars fastened at their upper end to the inner side of the standards I, by a belt fitting in a slot, by which they may be adjusted vertically, if required. These plates, which are for pressing the edges of the brick, have attached to their lower edges spiral springs *j*, which are secured to the ends of arm *k* from the top of the frame; or the arms may consist of a spring, and a rod be used in place of the spring *j*, for the purpose of keeping the plates swung up out of the way, except when forced down in pressing the brick.

The inner side of the sleeve H has attached to it plates or bars, *l*, which, pressing on the outer surface of the plates *g*, force them down, compressing the brick between them. The ends of the brick are dressed by means of corresponding plates *m m*, which hang pendent from rods *n n*, fastened to the top of the frame, as shown. These plates are forced inward by means of projections or bars *o* attached to H, similar to *l*, and are kept drawn out, except as just stated, by spiral springs, *p*, extending from the rods *n* to the standard I.

The axis of the driving-wheels or rollers of the endless belt extends beyond the frame, where it is provided with a crank or winch, *q*, for operating it.

In operating the machine it is necessary that the brick to be dressed be carried to a certain point directly under the piston or dressing-frame, and there retained. This required stopping of the carrier is accomplished in the following manner: The winch *q* extends beyond the axis, on the opposite side thereof, and forms an arm, *r*. To the top of frame A is pivoted, at or near its centre, so as to swing horizontally, a lever, J, having a lug or hook, *s*, to engage with arm *r*, or winch at one end, and the other, *v*, extending to the end of the sleeve, so that a wedge, *t*, in forcing the sleeve down, will press that end of the lever J outward, disengaging the hook from the arm *r* or winch at the opposite end. A spring, *u*, is attached to the side of the frame, as shown, with the central portion curved or inclined outward, so that the winch in turning will strike the said



incline and cause the upper end of the spring, by pressing against the end, *v*, of lever *J*, to swing the opposite end out, so that the hook *s* will arrest alternately the arm *r* and winch, as the latter is turned in the direction of the arrow, stopping the motion of the belt and the undressed brick at the proper place for being dressed. The process of dressing is accomplished by bringing down the end of the bent lever *F*, which, forcing down the frame *G* and its attachments, causes the plates or platens *g g*, *m m*, and *w* to press the brick confined within, on all sides, giving it a hard and finely-finished surface. The lever *F* being raised, the parts are sustained in that elevated position by the springs *j* attached to the lower edges of plates *g g*. The winch is now given one-half a turn around, when its arm *r* or winch itself, engaging with hook *s*, again stops the carrier, the dressed brick having been carried to one end of the machine, while another undressed one has taken its proper place under the dresser.

The foregoing operation is then repeated, the arm *r* and winch *q* being alternately arrested and released, by the wedge turning the lever *J* in the one position, and the spring *u* pressed in by the winch turning it in the other, as shown in fig. 3.

In pressing the brick, the plate *a* rests on a cross-piece, *K*, of the frame, which forms a firm support. The plates may be provided with spurs or points *x x*, to retain the brick in place thereon, and prevent their slipping when the carrier is stopped, as before described.

It is evident that various devices may be employed for operating the lever *D*, which may be operated directly without the use of the auxiliary lever *F*. The construction of the frame *G*, its attachments, and co-operative parts, may be considerably varied, and still the principle of the invention remain the same.

The great advantage of my improvements is the manner of dressing, by subjecting the brick to pressure simultaneously on all sides, whereby it is made more dense and durable, instead of dressing it by cutting off the inequalities, as in the ordinary methods.

The automatic manner of alternately arresting and releasing the carrier regularly at the proper time, as before described, greatly adds to the efficiency of the machine and the facility with which it is operated.

What I claim, is—

1. Alternately arresting and releasing the endless carrier *B*, by means of the lever *J*, winch, and arm *q r*, spring *u*, and wedge *t*, arranged and operating substantially as set forth.
2. I claim the hinged plates *g g* and springs *j j*, in combination with a vertically sliding frame for operating them, substantially in the manner and for the purpose specified.
3. I claim, in combination therewith, the end-plates *m m*, rods *n n*, and springs *p p*, arranged and operating substantially as and for the purpose set forth.
4. I claim the combination of the plates or platens *g g*, *m m*, and *w*, for dressing brick by simultaneously pressing it on all sides, when operated substantially in the manner specified.
5. I claim the machine, as a whole, constructed, arranged, and operating substantially as described.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES McNAMARA.

Witnesses:

JAY HYATT,

ALBERT HAIGHT.