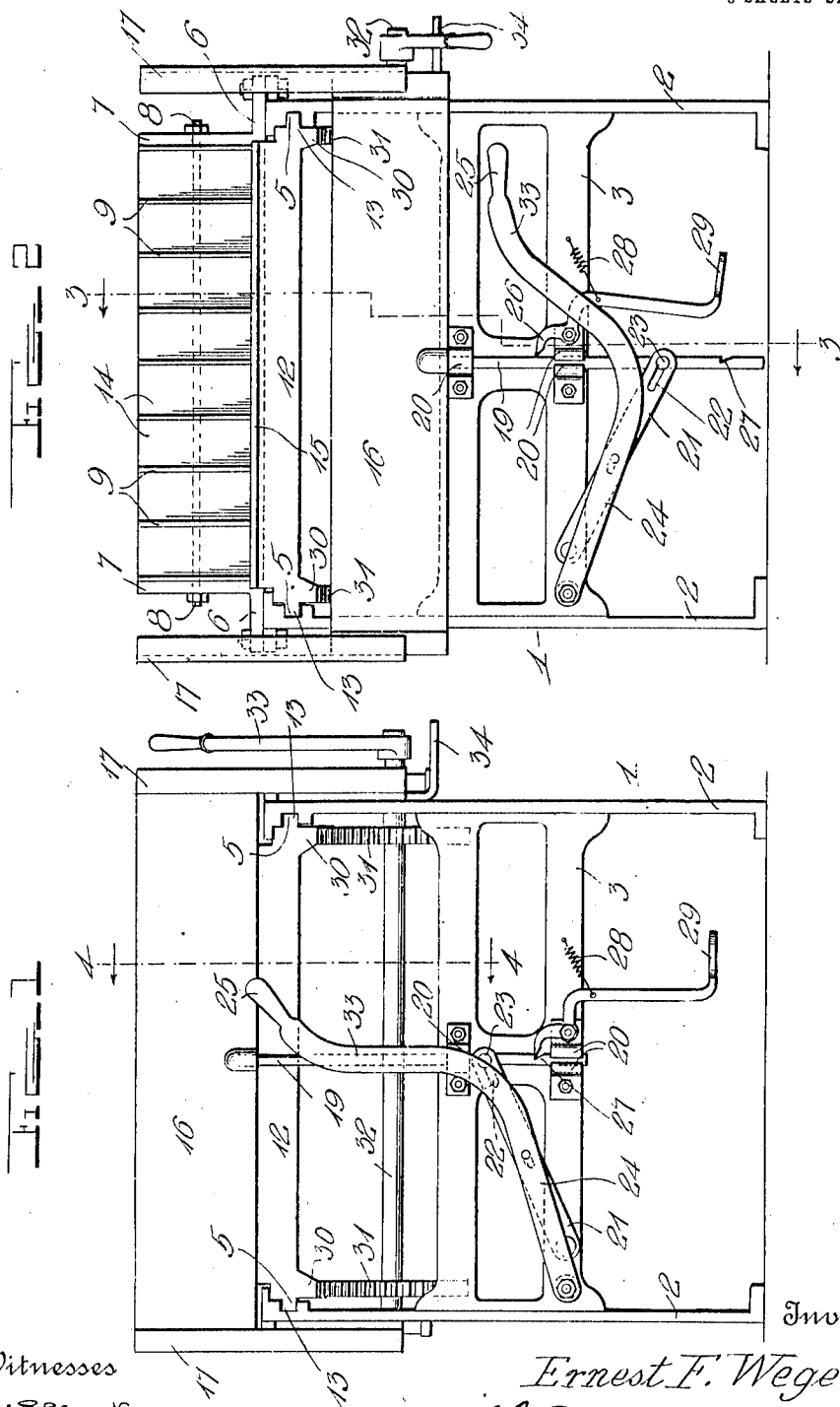


E. F. WEGE.
BRICK MACHINE.
APPLICATION FILED JULY 20, 1910.

996,175.

Patented June 27, 1911.

3 SHEETS-SHEET 1.



Inventor

Witnesses

E. F. Wege

C. H. Griesbauer.

By

Ernest F. Wege

H. B. Wilson & Co.

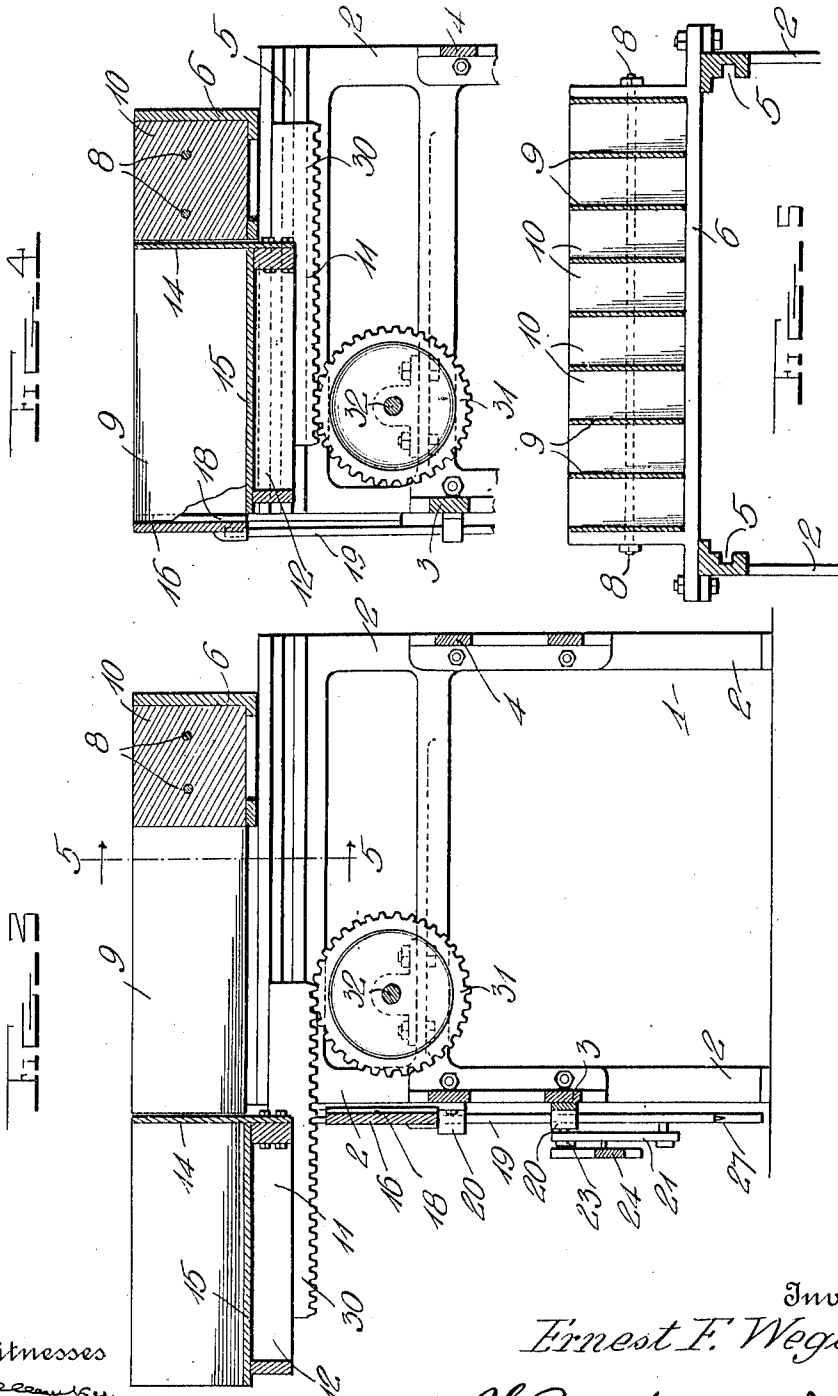
Attorneys

E. F. WEGE.
BRICK MACHINE.
APPLICATION FILED JULY 20, 1910.

996,175.

Patented June 27, 1911.

3 SHEETS—SHEET 2.



Witnesses

E. F. Wege

C. H. Griesbauer.

Inventor

Ernest F. Wege

by

A. B. Wilson & Co.

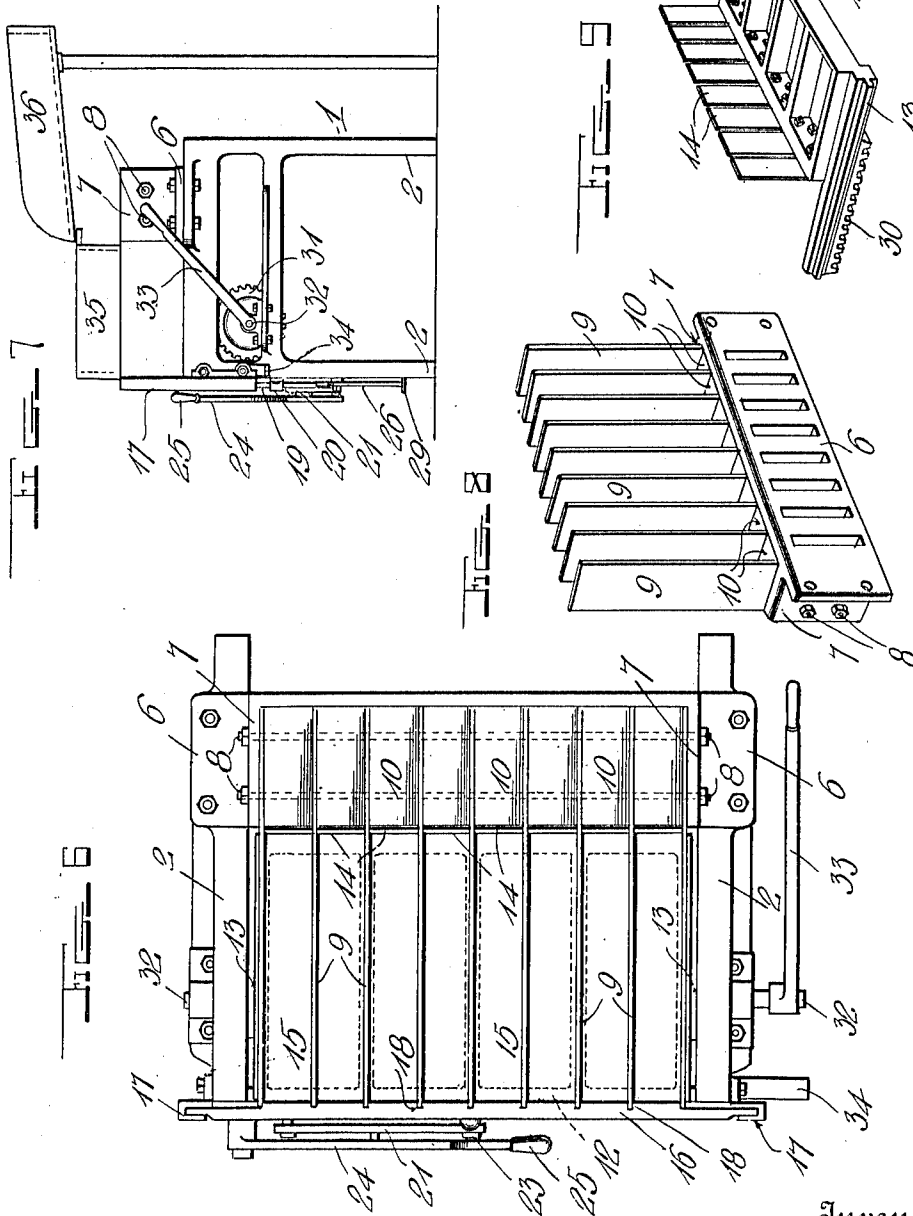
Attorneys

E. F. WEGE.
BRICK MACHINE.
APPLICATION FILED JULY 20, 1910.

996,175.

Patented June 27, 1911.

3 SHEETS—SHEET 3.



Inventor

Witnesses

E. F. Wege

E. H. Giesbauer.

Ernest F. Wege
by *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

ERNEST F. WEGE, OF LA CROSSE, WISCONSIN.

BRICK-MACHINE.

996,175.

Specification of Letters Patent. **Patented June 27, 1911.**

Application filed July 20, 1910. Serial No. 572,952.

To all whom it may concern:

Be it known that I, ERNEST F. WEGE, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State of Wisconsin, have invented certain new and useful Improvements in Brick-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in brick machines.

The object of the invention is to provide a machine of this character having an improved construction and arrangement of adjustable brick molding devices whereby bricks of different sizes may be readily formed.

Another object is to provide an improved means for quickly and easily delivering or discharging the finished bricks from the machine.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a front view of the machine showing the parts in closed position ready to receive the material for forming the bricks. Fig. 2 is a similar view showing the position of the parts when the device is opened ready for the delivery of the finished bricks. Fig. 3 is a vertical longitudinal sectional view taken on the line 3—3 of Fig. 2; Fig. 4 is a similar view taken on the line 4—4 of Fig. 1; Fig. 5 is a detail vertical cross section on the line 5—5 of Fig. 3; Fig. 6 is a top plan view of the machine; Fig. 7 is an end view thereof; Fig. 8 is a detail perspective view of the stationary member of the mold box; Fig. 9 is a similar view of the carriage or movable member of the mold box.

In the illustrated embodiment of the invention, I provide a main supporting frame 1 comprising end pieces 2 which are connected together by front and rear connecting plates 3 and 4. In the upper portion of the end frames are formed guide grooves or channels 5, the purpose of which will be hereinafter described.

Bolted or otherwise secured to the top of

the end frames 2 is the stationary member of the mold box in which the bricks are formed. The stationary member of the mold box comprises a cross plate 6 having formed thereon, adjacent its opposite ends, upwardly projecting end blocks 7 in which are secured the ends of partition fastening bolts or rods 8. Engaged with the plate 6 are a series of partition plates 9 which project forwardly over the main frame and have their forward ends terminating at the forward side of the main frame as shown. The partition plates 9 are spaced at suitable distances apart for forming bricks of the desired width or thickness by spacing blocks 10, through which the connecting rods 8 also pass.

The movable member of the mold box comprises a carriage 11, consisting of a rectangular frame 12 having on its opposite ends guide flanges 13 which are adapted to slidably engage the guide grooves or channels 5 in the side frames of the machine. On the rear side of the frame 12, is bolted or otherwise secured a series of brick ejecting plates 14 which also form the rear end walls of the mold compartments and are adapted to slidably engage the spaces between the partition plates 9 of the stationary member of the mold box. On the frame 12 is adapted to be placed a movable pallet 15 which, when the frame is in operative position, forms the bottom of the mold compartments.

The front end wall of the mold compartments is formed by a movable plate 16 which has its ends in sliding engagement with guide standards 17 secured to the opposite ends of the main frame, at the front corners thereof as shown. On the inner side of the front plate 16 is formed a series of vertical grooves or channels 18, which, when the front plate is up in operative position, are adapted to engage the front ends of the partition plates thereby securely bracing and holding said ends of the plates. The plate 16 is adapted to be moved upwardly and downwardly to operative and inoperative position by means of a suitable raising and lowering mechanism comprising a shaft or bar 19 which is secured at its upper end to the front side of the plate 16 and is slidably engaged with suitable guide brackets 20 on the front connecting plate 3 of the main frame as shown. Pivotaly mounted on the front connecting plate 3 is an operating link

21 in the inner end of which is formed a slot 22 whereby said end of the link is pivotally and slidably engaged with a connecting stud 23 on the bar or shaft 19. Also
 5 pivotally mounted on the plate 3 is an operating lever 24 which is pivotally and loosely connected with the link 21. The handle end of the lever 24 is bent upwardly at substantially right angles to the lever and
 10 is provided on its outer end with an operating handle 25. By thus connecting the lever 24 with the bar or shaft 19, said bar together with the front plate 16 is adapted to be readily raised or lowered thereby bringing the plate 16 up into operative engagement
 15 with the forward ends of the partition plates 9 or retracting said front plate downwardly below the carriage 12 thereby opening the front end of the mold box to permit the carriage to be brought forward in the operation of ejecting or delivering the molded bricks.

In order to hold the front plate up in operative position I provide a suitable fastening mechanism comprising a catch 26, which
 25 is pivotally mounted on the plate 3 and is adapted to engage a notch 27 in the bar or shaft 19 when the latter is raised to bring the plate 16 to an operative position. The
 30 catch 26 is provided with a retracting spring 28 whereby the upper end of the catch is held in position to engage the notch 27 when brought opposite thereto, thereby holding the fastening parts in elevated position.
 35 The catch 26 is also provided with a foot treadle 29 whereby the same is disengaged from the notch 27 to permit the bar 19 and plate 16 to be lowered.

In order to move the carriage 11 to operative and inoperative positions, I provide said carriage with operating racks 30, said racks being secured to the opposite ends of the frame 12 and projecting rearwardly a suitable distance in the rear side of the frame
 40 to permit the latter to be moved forwardly a sufficient distance to bring the ejecting plates 14 to the forward ends of the partition plates thereby entirely ejecting the bricks from between said partition plates.
 45 The guide flanges 13 on the opposite ends of the frame 12, also project beyond the side of the frame and the said guide flanges and racks may, if desired, be of integral construction. The racks 30 are in operative
 50 engagement with the carriage projecting and retracting gears 31 fixedly mounted on an operating shaft 32 journaled in suitable bearings in the end frames 2 of the machine. One end of the shaft 32 projects beyond one
 55 end of the machine and has engaged therewith an operating lever 33 which, when swung in one direction or the other, will rock the shaft 32 thereby turning the gears 31 and thus projecting or retracting the carriage 11 beneath the partition plates 9 of the

stationary member of the mold box. A stop bracket 34 is preferably secured to the end of the machine to receive the lever 33 when the same is swung downwardly in the position for projecting the carriage from beneath the partitions 9 in the process of ejecting or delivering the bricks from the mold. 70

In the use of the machine I preferably provide a hopper 35 to receive the material from a suitable chute 36 arranged above and
 75 at the rear of the machine, said hopper being disposed over the partition plates 9, whereby the material is readily guided and discharged into the mold compartments from the chute. The hopper 35 and chute 36 are
 80 clearly shown in Fig. 7.

In the operation of the machine a thin pallet of metal or other suitable material is placed on the frame 12 of the carriage in front of the ejecting plates 4 after which
 85 the carriage is retracted to bring the pallet beneath the partitions 9 and the ejecting plates to the desired position between said partitions. After the carriage has thus been retracted, the front plate 16 is brought
 90 up into engagement with the ends of the partition plates 9 thereby closing the front ends of the mold compartments. With the parts in this position the material is placed in said compartments to form the bricks. 95
 When the material has sufficiently set the front plate is lowered and the carriage together with the pallet board and molded bricks thereon is brought forward and the bricks forced from between the partition
 100 plates by the ejecting plates 14. After the carriage has been moved to a position where the bricks are entirely ejected from between the partition plates 9, the pallet board and bricks are lifted from the frame 12 of the carriage and placed in a suitable position
 105 to permit the further hardening of the bricks. By moving the carriage back to a greater or less degree and thus moving the frame 12 and the ejecting plates farther back
 110 between the partition plates it will be readily seen that bricks of different length may be formed, a pallet board corresponding with the length of the bricks being placed across the frame 12 of the carriage. It will be also
 115 readily seen that by removing one or more of the partitions 9 and inserting spacing blocks 10 of greater or less width, the space between the partition plates may be regulated to form bricks of different widths. 120

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation. 125

What is claimed is:

The combination of a main frame, a stationary mold member thereon, a movable mold member mounted on the main frame, means for sliding said movable member to 130

and from the stationary member, a vertically sliding plate mounted on the frame and arranged to close the front end of the movable mold member, bearings on the frame below the middle of said plate, a rod rigid with said plate and depending from the middle of the lower edge thereof through said bearings, a link pivoted at one end to the main frame and having a pin and slot connection with said rod at its opposite end, and a lever pivoted at one end on the frame

adjacent but beyond the pivoted end of the link and having one end free, said lever having a pin and slot connection with the link between the ends of the same.

15

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ERNEST F. WEGE.

Witnesses:

A. C. WOLFE,

MARIE A. TIMMERLING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
