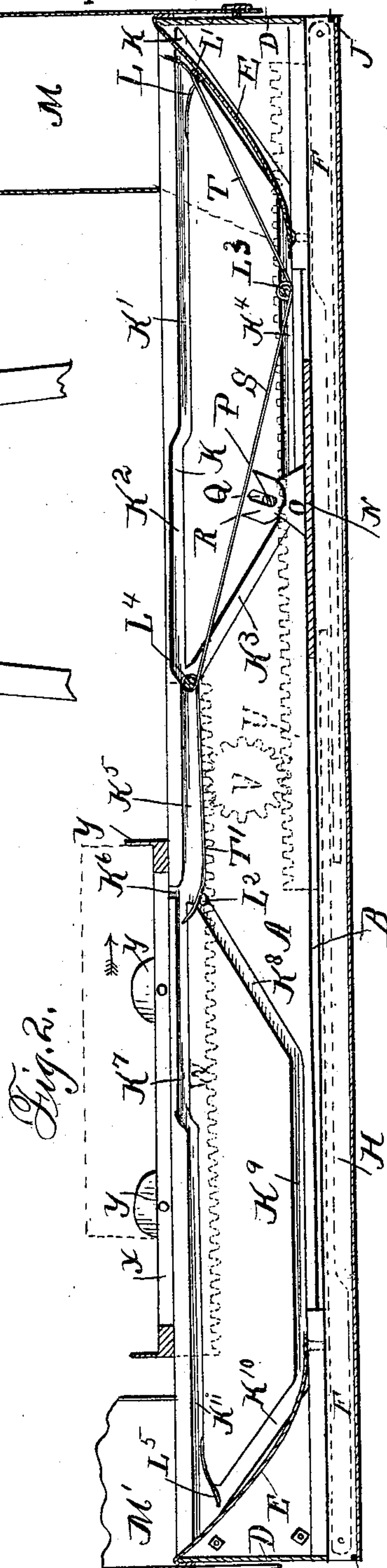
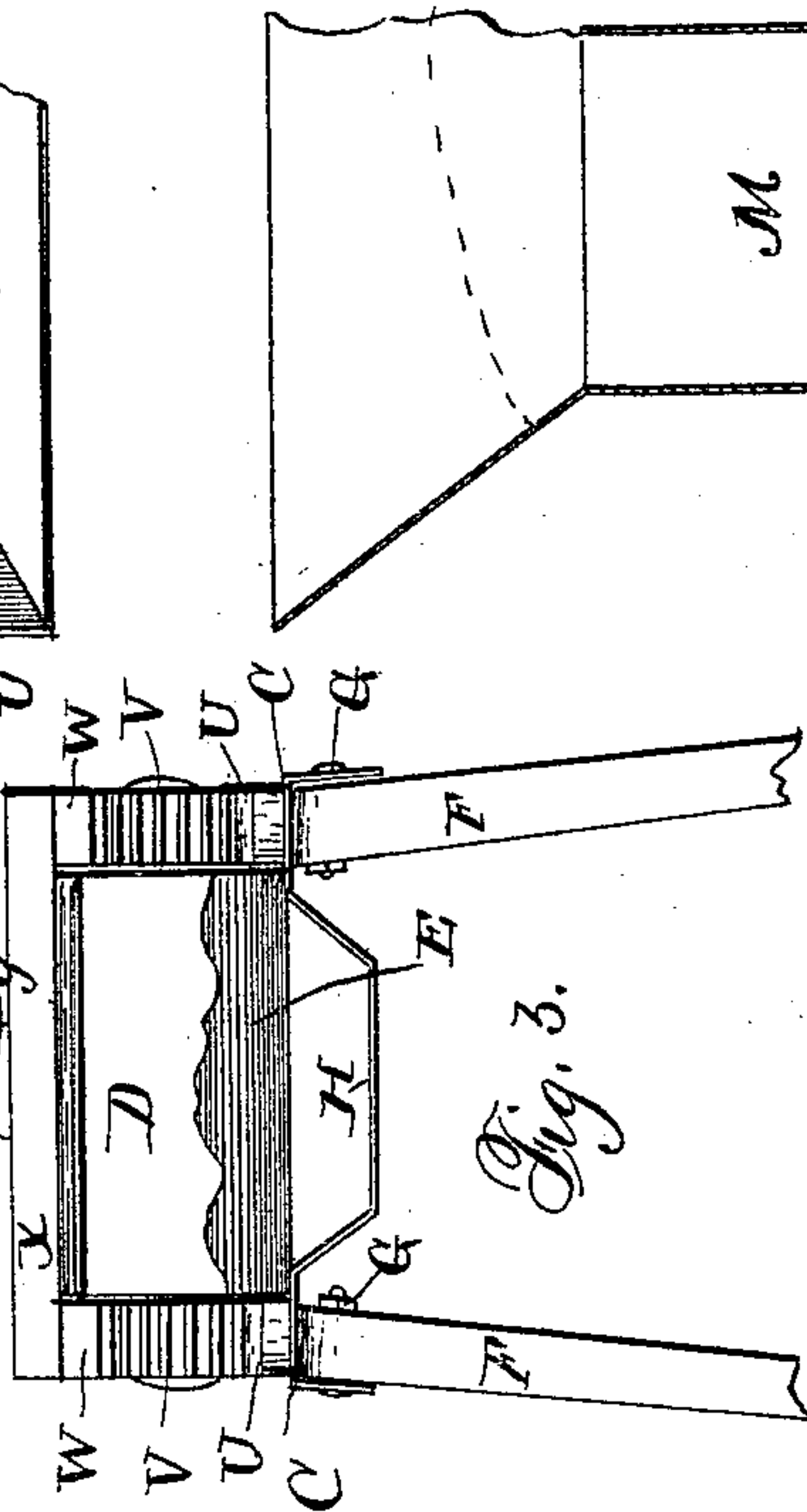
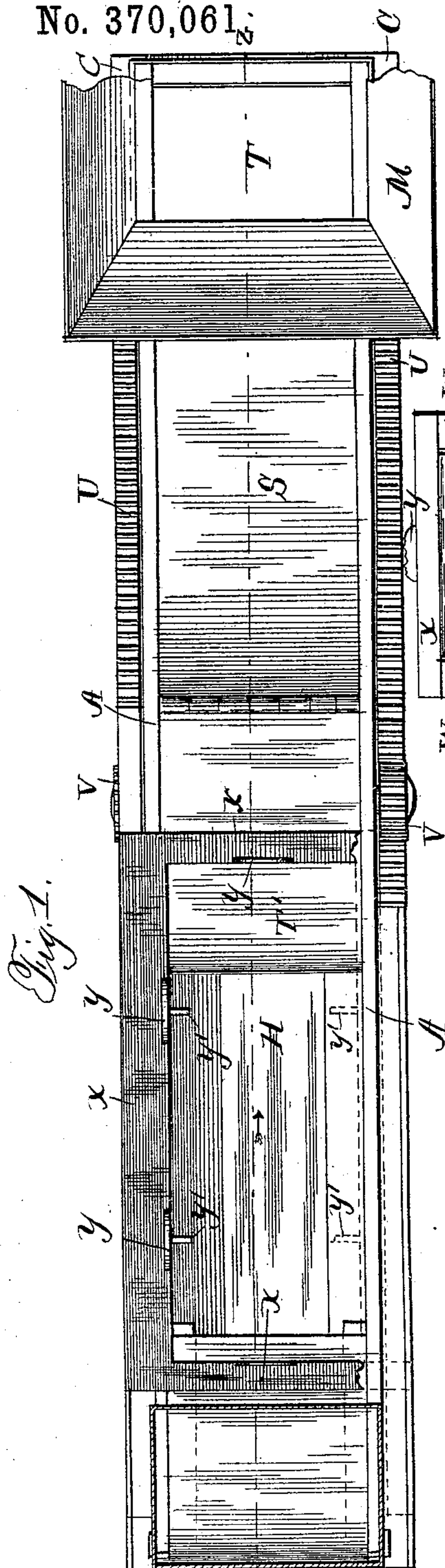


(No Model.)

R. E. HUNN.
BRICK PLASTERING MACHINE.

No. 370,061.

Patented Sept. 20, 1887.



Witnesses.
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UNITED STATES PATENT OFFICE.

ROBERT E. HUNN, OF CHICAGO, ILLINOIS.

BRICK-PLASTERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 370,061, dated September 20, 1887.

Application filed March 19, 1887. Serial No. 231,593. (No model.)

To all whom it may concern:

Be it known that I, ROBERT E. HUNN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have
5 invented a Machine for Spreading Mortar on Bricks to be Used in Making Walls, of which the following is a specification.

My invention relates to a mechanism for spreading the mortar on bricks preparatory
10 to laying them in walls, and has for its object to provide a device whereby the mortar can be conveniently and evenly applied to the surface of the brick. This object I accomplish by means of the mechanism illustrated in the
15 accompanying drawings, wherein—

Figure 1 is a plan view of my device with certain parts broken away. Fig. 2 is a section through the line Z Z. Fig. 3 is an end view.

Like parts are indicated by the same letter
20 in all the figures.

A A are side frame-pieces, having each at its lower edge a portion, B B, cut away. These side pieces are secured to the frame-pieces C C, and are connected at each end by
25 the end cross-pieces, D D, and the curved metallic plates E E. The side pieces, C C, are bent over at their sides, and to them are hinged the legs F F by the bolts G G. The bottom of the machine is downwardly bent, as at H, and
30 connected with the side pieces, C C, and supported thereon.

Secured to the side pieces, at the ends thereof, are the pins J J, which prevent the hinged legs from spreading too far when they are
35 opened outward to support the frame. Each of these side pieces is provided on its inner surface with a groove composed of the parts, as shown, and numbered K, K', K², K³, K⁴, K⁵, K⁶, K⁷, K⁸, K⁹, K¹⁰, and K¹¹, shaped as shown,
40 and having at each end the spring-switch L L⁵. At the ends of the machine is secured the mortar-receptacle M and M' in any convenient manner. Within the body of the device is a transverse sliding board, N, on which rises the
45 standard O, in the center thereof. This standard bears the pin P at its upper end, which pin passes through a slot, Q, in the hanger R of the central plate, S, of the trowel. This central plate has hinged to it at its ends the
50 spreading-points T T', curved at their outer ends. Secured at each side to the plate N is a

rack, U. These racks slide on the side pieces, C C, of the frame, and the slide-board N passes across the frame from side to side, underneath the side pieces, and reciprocates in the cut-out
55 portion B at the bottom of the side pieces.

V V are pinions journaled about midway of the side pieces of the frame and adapted to engage the racks U U and also the racks W W on the sliding frame X. This sliding frame
60 has the guide-plates Y Y thereon and the pins Y', whereby the brick may be placed on such sliding frame and held securely in position during the operation of the machinery.

L' L² are transverse pins on the ends of the
65 trowel-points T T', which are adapted to slide in the grooves, and when moved past the spring L L⁵ will switch the trowel into the upper portion of the groove.

At the point where the plate S is hinged to
70 the points T T' are similar transverse pins, L³ L⁴, which also travel in the grooves and cause the trowel to change its angle from time to time, as hereinafter explained.

The use and operation of my invention are
75 as follows: My invention is designed to be used by brick-layers, and is especially adapted for use in buildings where first-class work is required, and where it is desired to have the mortar on the bricks evenly and accurately
80 laid. The machine, set up as shown in the drawings, is placed in a suitable position, and is moved about with the progress of the work. The mortar-receptacles at the ends are furnished with a suitable quantity of mortar,
85 which passes down into the frame and on the curved metallic sheets E, same as shown in the dotted lines in Fig. 2. Assuming that the parts are as shown in the drawings, for in both
90 Figs. 1 and 2 they are shown in the same positions, the operator places the brick upon the sliding frame X, the brick resting upon the pins Y' and against the guides Y, so as to be brought properly into position. In this manner the entire lower surface of the brick is ex-
95 posed, except a very small portion thereof, which rests upon the pins. The brick, together with the sliding frame, is now pushed in the direction of the arrows. The racks W W on the sides of this frame, engaging the pin-
100 ions V, cause them to turn as the slide-frame and brick proceed in their course. At the

same time the revolution of the pinions V causes the racks U to move in the opposite direction, and since these racks are secured to the plate N, and the plate N by its standard 5 and pin is attached to the trowel composed of the portions S and T T', the said trowel is moved in a direction opposite from that in which the brick is being pushed. It will be observed the pin L' on the point T has just 10 passed and is above the spring-switch L, so that as the trowel travels in a direction opposite to that of the arrows the transverse pin L' will travel in the groove K', thus bringing its load of mortar against the bottom of the 15 brick on the sliding frame. As the motion proceeds, the pin L' passes up the incline K', thus straightening out the parts S and T of the trowel, so as to cause them to pass along the bottom of the brick in a plane parallel 20 therewith, except as to the end of the point T, which accurately spreads the mortar over the brick. At the end of the stroke it will be found that the trowel occupies the same relative position in the opposite end of the 25 machine. The second brick is then placed in position, the motion is reversed, and the operation is repeated. By means of this machine it will be found that the mortar is very conveniently and accurately spread over the 30 bottom of the brick, and it may then be placed in position on the wall. The slot Q permits the necessary vertical motion of the part S of the trowel. The legs F are folded down, and when it is desired to transport the machine 35 they may be folded up, as indicated in dotted lines. The shape of the bottom H permits what mortar may pass out of the machine to drop therein, where it can be easily removed by means of a shovel and returned to the hop- 40 per or mortar-receptacle. The passage K⁶ forms an entrance to the system of grooves, whereby the trowel may be removed, if desired.

I claim—

45 1. In a machine for applying plaster to brick, the combination of a frame provided with brick-supports and a trowel which travels on such frame below said brick-supports, so as to spread the mortar on the bot- 50 tom of the brick.

2. In a machine for applying plaster to brick, the combination of a frame, a movable

brick-support thereon, and a trowel along which the brick-support travels, so that the trowel applies the mortar to one side of the 55 brick.

3. In a machine for applying plaster to brick, the combination of a frame, a movable brick-support thereon, and a movable trowel thereon, the support and trowel adapted to 60 move along each other in opposite directions.

4. In a machine for applying plaster to brick, a frame, in combination with a trowel consisting of hinged sections and grooved supporting-pieces in which the sections slide, 65 so that the trowel passes along the brick, its sections from time to time changing their angles to each other.

5. In a machine for applying plaster to brick, a trowel composed of hinged sections 70 and transverse rods, in combination with grooved supporting-pieces to receive the ends of the rods and a device whereby the trowel is carried along the bricks, its sections changing their angles so as to spread the mortar. 75

6. In a machine for applying plaster to brick, the combination of a movable trowel, a movable brick-supporting frame, and connect- 80 ing-gears, whereby the motion of either is communicated to the other.

7. In a machine for applying plaster to brick, the combination of a movable trowel, a movable brick-supporting frame, and gears and racks connecting them, so that the mo- 85 tion of either causes them to reciprocate along each other in opposite directions.

8. In a machine for applying plaster to brick, the combination of a brick-supporting frame, a trowel, gear-wheels and racks con- 90 necting the trowel-frame, and mortar-receptacles at opposite ends of the frame.

9. In a machine for applying plaster to brick, the combination of a frame with a downwardly-curved bottom to receive the mortar which falls through the machine. 95

10. In a machine for applying plaster to brick, the combination of a trowel, a brick-supporting frame, a mortar-receptacle, a machine-frame, and legs hinged thereto, adapted to be extended or folded at will.

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Witnesses:

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