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A. VAN DE SANDT

MORTAR SPREADER

Filed April 26, 1924

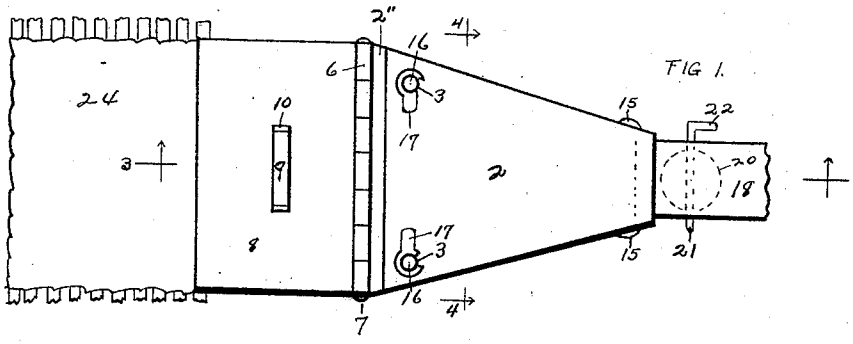


FIG. 1.

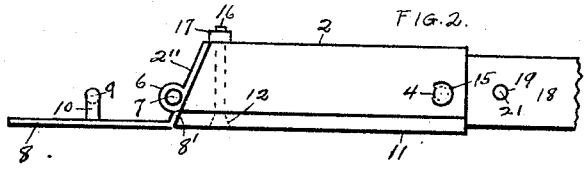


FIG. 2.

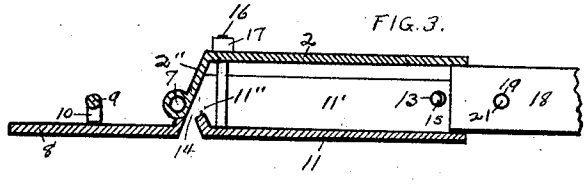


FIG. 3.

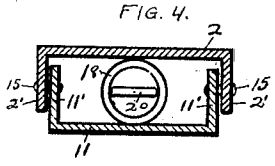


FIG. 4.

WITNESSES.

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# UNITED STATES PATENT OFFICE.

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## MORTAR SPREADER.

Application filed April 26, 1924. Serial No. 709,182.

My invention relates to improvements in mortar spreaders, or mortar spreading mechanisms, in which there is a mortar ejector, or container, provided at one end with an intake opening having therein a feed pipe for connecting with a stuffing machine and having at its opposite end a slot, or elongated opening, and a trowel hinged to the ejector near the slot, the ejector having two sections or members (a front or top section and a rear or lower section) pivoted together near the intake opening and having their opposite ends connected by two bolts for adjusting the width of the slot through which mortar may be discharged and spread by the trowel.

The object of my improvements is to provide time and labor-saving means for applying mortar to lath, or other surfaces.

I attain this object by means of the mechanism illustrated in the accompanying drawing, in which—

Fig. 1 is a top plan view of my improved mortar spreading mechanism together with a fragmentary section of lath and plaster as the latter would appear when applied to the lath with my improved mechanism;

Fig. 2—a view of the lower edge of Fig. 1 without the lath and plaster;

Fig. 3—a longitudinal sectional view taken on the line 3, 3, of Fig. 1; and

Fig. 4—a cross section taken on the line 4, 4, of Fig. 1.

Referring to the drawing in detail:—

The reference numeral 2 represents the front or top section or member of the mortar ejector (i. e., the member nearest the operator when in use). Said member 2 is provided, near the discharge end of the ejector, with two openings 3 and has each of its side edges bent backward or downwardly at a right angle to the top portion of the member to form a flange 2′ each having, near the intake end of the ejector, an opening 4.

At the discharge end of the ejector member 2 has its end edge bent downwardly at 2″ and connected by a hinge 6, having a ball or pin 7, with the upturned edge 8′ of the trowel 8 having a handle 9 connected with the trowel by a bracket 10. The rear or lower member 11 is provided, near the discharge end of the ejector, with two openings 12, and has its side edges bent forward or upward at a right angle to the bottom portion of the member to form flanges 11′ closely fitting inside of the flanges 2′ of the member 2, each flange 11′ having, near the intake end of the ejector, an opening 13.

At the discharge end of the ejector member 11 has its end edge 11″ bent forward or upward whereby a slot or elongated opening 14 is formed between the edge 11″ of member 11 and the adjacent edge 8′ of the trowel.

At the intake end of the ejector the members 2 and 11 are pivotally connected by two rivets 15 arranged in the openings 4 in the flanges 2′, and in the openings 13 in the flanges 11′.

At the discharge end of the ejector the members are adjustably connected by two bolts 16 arranged in the openings 3 in member 2 and in openings 12 in member 11 and provided with thumb nuts 17.

A feed pipe 18, for connection with a stuffing machine, has one end arranged in the intake end of the ejector and is provided with two openings 19. Arranged in the pipe 18 is a shut-off comprising a disk or shutter 20 mounted on a shaft 21 arranged in the pipe openings 19 and provided with a handle 22.

To spread mortar on lath by means of my improved mortar spreading mechanism, the operation is as follows:

The feed pipe 18 being connected with a suitable stuffing machine the operator holds the trowel in one hand and the ejector in the other hand with the mortar spreader against the lath. Mortar may then be forced, by a stuffing machine, through the feed pipe into the ejector and as it passes through the slot the ejector is moved endwise in the direction indicated by the arrows on line 4, 4, Fig. 1, whereby the mortar passes under the trowel and is forced against and between the lath 23 as indicated at 24 in Fig. 1 of the drawing. The spreader may be operated either horizontally or vertically.

The flow of mortar into the ejector may be retarded or stopped by turning the shut-off handle 22 or by slowing down or stopping the stuffing machine.

If the mortar has a tendency to flow slower through the ends than through the middle of the slot 14, a diverter may be so arranged in the ejector as to partially divert the flow of mortar through the center of the ejector.

To prevent mortar escaping at the ends of the trowel the latter may be made longer

than the slot by either making the trowel longer than the width of the ejector or by making the slot shorter than the width of the ejector.

The width of the slot may be varied by screwing the nuts 17 in or out.

The feed pipe and stuffing machine should be connected by a flexible pipe.

The mortar ejector and the trowel may be adjustably connected in such manner that when the mortar ejector is held against and slid on the lath (or other surface on which mortar is to be spread), the trowel will be the desired thickness of the mortar away from the lath. The adjustable connection between the trowel and ejector could be made in any suitable manner. One way would be to hinge the trowel to a piece of sheet metal, other than part 2″, and then slidably connect it with part 2″ by bolts arranged in perforations formed in part 2″ and in the part hinged to the trowel, the perforations in one of the parts being slotted so as to permit a vertical movement of one part with relation to the other part.

The mortar ejector may be a rigid frame composed of one or more pieces, instead of two pieces pivoted together as shown, in which case the width of the slot could be varied by means of an attachment adjustably connected with the ejector on either side or lip of the slot. Or the end portion 2″ of member 2 could be a separate piece and have its upper edge hinged to the member 2 whereby its lower edge could be moved in or out, to make the slot narrower or wider, and be adjustably secured in the desired position.

As there are other minor changes that might be made in the construction of my improved mortar spreading mechanism I do not wish to be limited to the particular construction shown and described.

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

1. In a mortar spreading mechanism of the character described, a mortar ejector having an intake opening and a discharge opening and having an upper member and a lower member pivoted together at the intake end, each member having near the discharge end two openings, the openings in the upper member registering with the openings in the lower member, two bolts arranged in the openings and extending through the ejector and adapted to regulate the size of the discharge opening, and a trowel provided with a handle and having one edge hinged to the upper member above the discharge opening.

2. In a mortar spreading mechanism of the character described, a mortar ejector having at one end an intake opening and at its opposite end a discharge slot and comprising an upper member and a lower member pivoted together at the intake end, the lower member having on each side thereof an upturned flange, the upper member having on each side thereof a down turned flange, the flanges of one member slidably fitting inside of the flanges of the other member, adjustable means connecting the discharge end of the members and adapted to control the width of the discharge slot, and a hand operated trowel provided with a handle and having one edge hinged to the discharge end of the upper member above the discharge slot.

3. In a mortar spreading mechanism of the character described, a mortar ejector having an intake opening and a discharge opening, said ejector comprising two members pivoted together at the intake opening, adjustable means connecting the discharge end of the members and adapted to control the size of the discharge opening, and a hand operated trowel provided with a handle and having one edge bent upwardly and adjustably connected with the ejector whereby mortar passed through the discharge opening will pass under and be spread by the trowel.

4. In a mortar spreading mechanism of the character described, a mortar ejector having an intake opening and a discharge opening, said ejector comprising two members pivoted together at the intake opening, adjustable means connecting the discharge end of the members and adapted to control the size of the discharge opening, and a hand operated trowel adjustably connected with the ejector whereby mortar passed through the discharge opening will pass under and be spread by the trowel.

5. In a mortar spreading mechanism of the character described, a mortar ejector having an intake opening and a discharge opening, adjustable means connected with the ejector and adapted to control the size of the discharge opening, and a hand operated trowel connected with the ejector whereby mortar passed through the discharge opening will pass under and be spread by the trowel.

In testimony whereof I affix my signature.

ALFRED VAN DE SANDT.