C. D. DOLL.

MORTAR SPREADER.

APPLICATION FILED APR. 8, 1915.

1,158,460.

Patented Nov. 2, 1915.

2 SHEETS—SHEET 1.

FIG. 1.

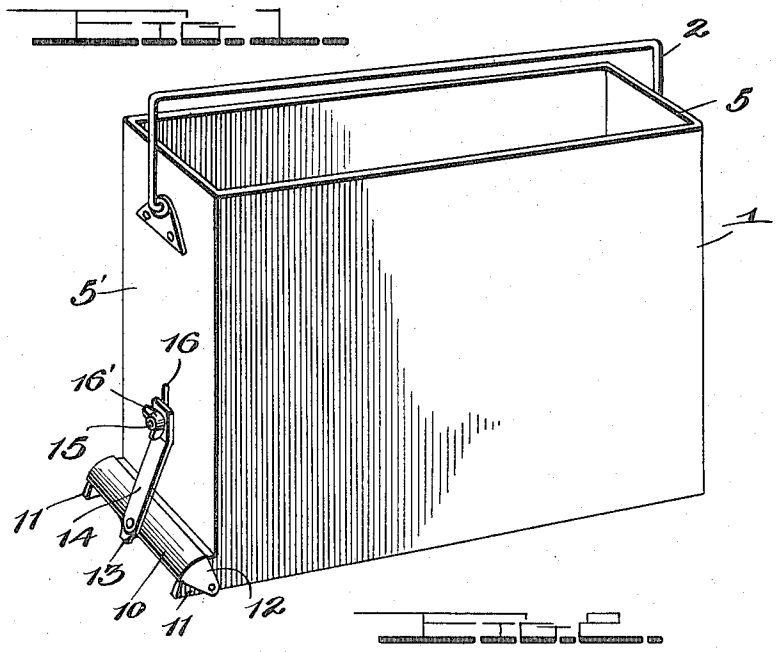
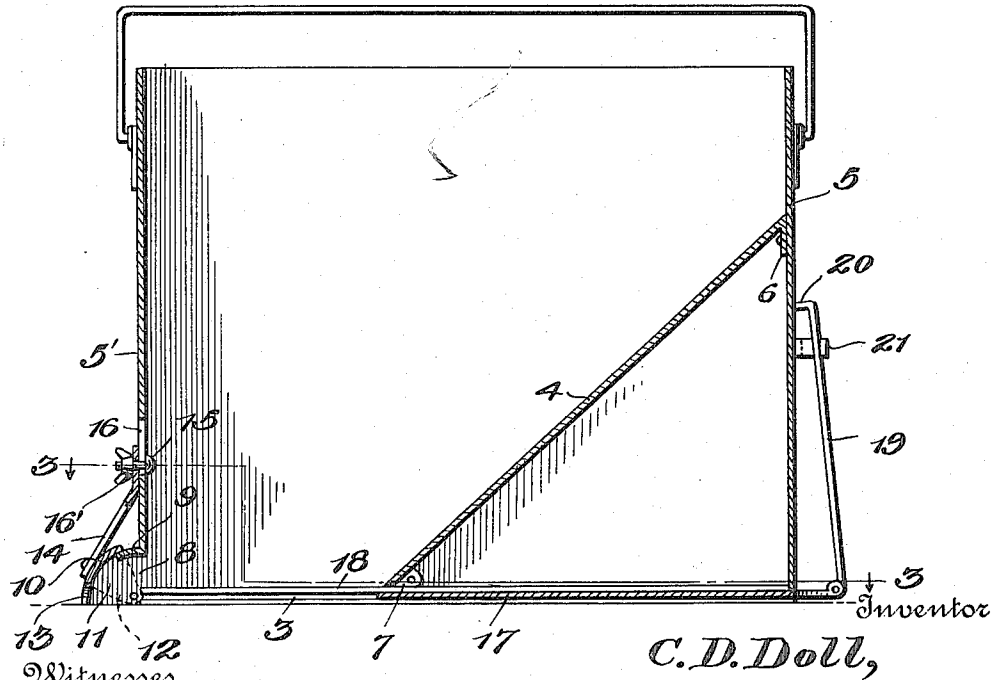


FIG. 2.



Witnesses

Chas. L. Griestauer

C. [illegible]

Inventor

C. D. Doll,

by A. Bellinson & Co.

Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

C. D. DOLL.

MORTAR SPREADER.

APPLICATION FILED APR. 8, 1915.

1,158,460.

Patented Nov. 2, 1915.

2 SHEETS—SHEET 2.

FIG. 3.

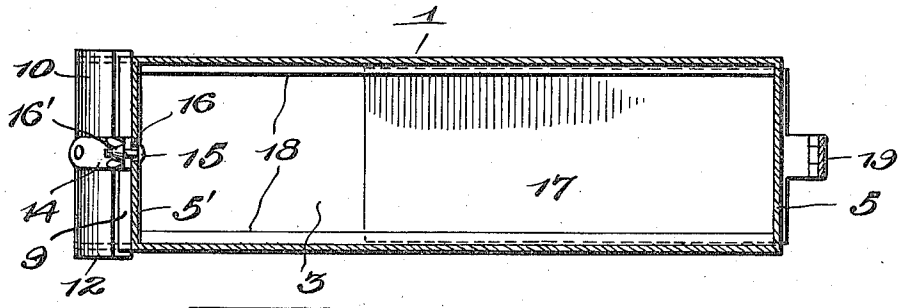


FIG. 4.

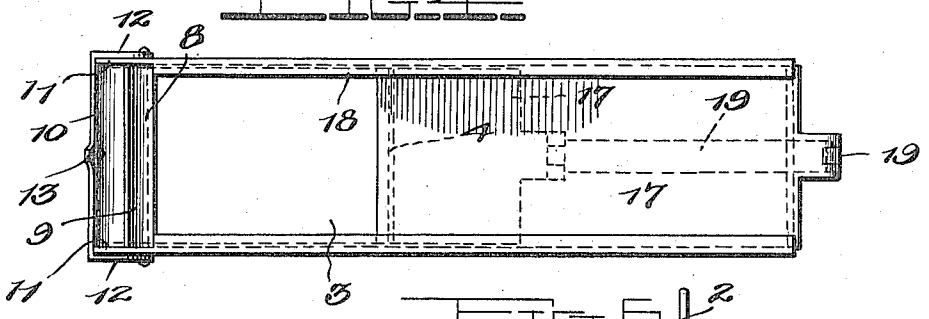


FIG. 5.

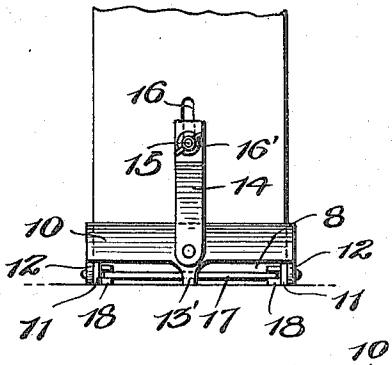


FIG. 6.

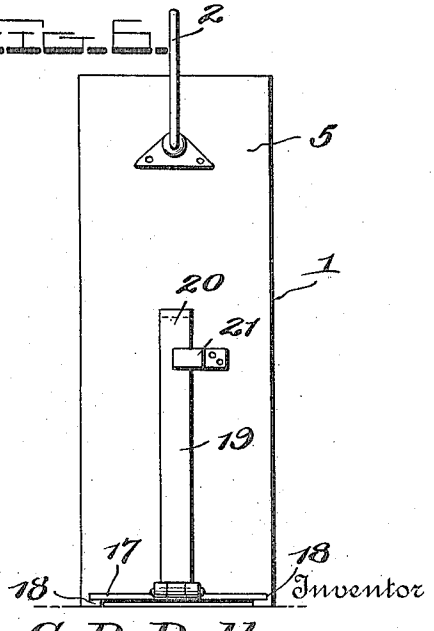
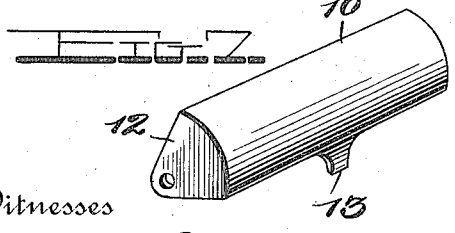


FIG. 7.



Witnesses

Chas. L. Grisbauer

E. Brauer

Inventor

C. D. Doll,

by D. B. Wilson & Co.

Attorneys

UNITED STATES PATENT OFFICE.

CASTLEMAN DAVID DOLL, OF LOUISVILLE, KENTUCKY.

MORTAR-SPREADER.

1,158,460. Specification of Letters Patent. Patented Nov. 2, 1915.

Application filed April 8, 1915. Serial No. 20,010.

To all whom it may concern:

Be it known that I, CASTLEMAN D. DOLL, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Mortar-Spreaders; 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 mortar spreaders designed to be moved over the top of a wall for depositing a layer of mortar thereon.

The primary object of the invention is to provide a device of this character so constructed as to deposit a layer of uniform thickness and having means under control of the operator for regulating the thickness of the layer deposited.

Another object is to provide a spreader with simple and efficient means for dividing the deposit of plastic material into two parallel layers arranged side by side.

Another object is to provide simple and efficient means for cutting off the feed of mortar when desired.

With these and other objects in view the invention consists of certain novel features of construction and the combination and arrangement of parts as will be more fully described and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of this improved spreader taken from the rear; Fig. 2 is a longitudinal vertical section thereof; Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2; Fig. 4 is a bottom plan view thereof; Fig. 5 is a rear elevation of a portion of the spreader; Fig. 6 is a front elevation thereof; Fig. 7 is a detail perspective view of a controlling gate or valve.

In the embodiment illustrated a receptacle 1 is shown in the form of a rectangular vessel open at its top and provided with a bail shaped handle 2 connected with the end members thereof and which is designed for transporting the device or for lifting it from place to place. This receptacle 1 is provided in its bottom at one end with an opening 3 through which the mortar contained in the receptacle is designed to be fed. A slanting partition 4 is arranged within said receptacle 1 and inclines from the front wall thereof at a point near the top downwardly and rearwardly to a point adjacent the opening 3 therein. This false bottom or partition 4 may be connected in any suitable manner to the end wall 5 of the receptacle it being here shown provided with a depending flange 6 disposed in contact with the wall 5 and connected thereto by riveting or otherwise. The lower end of the partition which is disposed at the rear end of the opening 3 is provided with apertured ears 7 to receive fastening elements for connecting it to the side walls of the receptacle 1. This inclined partition or false bottom 4 is designed to insure the feeding of the mortar through the opening at the rear of the receptacle serving to direct it downwardly thereinto.

The rear end wall 5′ of the receptacle is provided at its lower end with a transversely extending opening 8 the height of which controls the thickness of the layer of mortar to be spread and this opening is controlled by a pivotally mounted gate or valve 10 to be described. Extending transversely across the end wall 5′ at the top of the opening 8 is an outwardly projecting lip 9 which may be of any desired width and is designed for co-action with the gate 10 for varying the height of the opening 8 and is designed to close the space between the upper edge of the gate valve and the outer face of the wall 5′ when the valve is lowered either partially or entirely, the rear edge of said valve lapping said lip and being here shown arranged in overlapping relation, it being necessary to have the upper or rear edge of the valve spaced from the wall 5′ to provide for the opening of the valve. The distance between the rear edge of the valve and said wall when the valve is lowered controls the extent the valve may be opened. Projecting rearwardly from the side walls of the receptacle 1 at the lower end thereof are two flanges 11 which form guards designed to prevent the mortar from dropping over the sides of the brick during the operation of the spreader.

The gate valve 10 is here shown arcuate in cross sectional contour and of a length equal to the width of the rear end of the receptacle 1 and is provided at its ends with laterally extending inturned apertured ears 12 here shown triangular in form with their bases or wider portions secured to the member 10 and their apices extending outwardly at the free ends thereof which apertures are placed for pivotally connecting them with the

flanges 11 at opposite sides of the receptacle to provide for the upward and downward swinging of the gate in the arc of a circle, the inner edge of which overlaps the lip 9 on the rear end of the receptacle. This gate valve 10 is provided intermediately of its ends preferably midway of its length with a depending lug 13 which is designed to rest on the wall over which the spreader is drawn to separate the mortar fed by the spreader into two parallel layers arranged side by side said lug 13 being here termed a divider.

A strap 14 is connected at one end to the gate valve 10 being here shown connected midway the ends thereof in alinement with the divider 13. The free end of the strap 14 is arranged at an angle to the body portion thereof and is designed to lie flat against the outer face of the end wall 5′ and is engaged with a bolt 15 which extends through a longitudinally disposed slot 16 formed in the wall 5′ and by means of which the gate valve may be adjusted vertically and locked in adjusted position by means of a winged nut 16′ to regulate the thickness of the layer of mortar to be spread, the lower edge of said gate passing over the mortar fed through the opening 3 and thus smoothing it off and controlling its thickness.

A slide 17 is mounted for longitudinal movement over the bottom of the receptacle 1 and is designed to close the opening 3 at the rear end thereof when it is desired to lift the receptacle from place to place or when it is to be transported for any distance. This slide 17 is here shown mounted in guides 18 at the opposite side edges of the bottom portion of the receptacle. (See Figs. 5 and 6.) This slide 17 is of a length slightly greater than the length of the opening 3 in the bottom of the receptacle and is designed when in closed position to completely close the receptacle to prevent dropping out of the mortar through said opening. Hingedly connected to the front end of this slide 17 is an operating handle 19 here shown in the form of a metal bar connected at one end to the slide 17 and having its free end bent laterally as shown at 20 to provide a finger grip for operating the bottom 17 for sliding it back and forth in the guides 18 for opening and closing the opening 3. When in open position this handle 19 will project beyond the front end of the receptacle and it is adapted to be arranged in upright position as shown in Figs. 2 and 6 and held in this position by a spring clip 21 secured to the outer face of the front wall 5 of the receptacle. When it is desired to close the slide this handle 19 is disconnected from the clip 21 and is moved inwardly by the operator thereby causing the slide 17 to move rearwardly and close the opening 3 and when in this position said handle 19 will project a slight distance only beyond the front wall of the receptacle but not far enough to be in the way of the operator.

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

I claim as my invention:

1. A mortar spreader comprising a receptacle having an opening at one end and in one end of the bottom thereof, flanges arranged on opposite sides of said receptacle at the open end thereof and projecting forwardly in advance of said end to form guards to prevent dropping of the mortar over the sides of the brick during the operation of the spreader and to provide valve supports, a gate valve pivotally mounted on said flanges to swing toward and away from said end, means for closing the space between said receptacle end and said valve, and means for adjusting said valve and holding it in adjusted position.

2. A mortar spreader comprising a receptacle having an opening at one end and in one end of the bottom thereof, flanges arranged on opposite sides of said receptacle at the open end thereof and projecting forwardly in advance of said end to form guards and to provide valve supports, a gate valve pivotally mounted on said flanges, and means connected with said valve for adjusting it to vary the distance between its lower edge and the surface over which the spreader is to be drawn.

3. A mortar spreader comprising a receptacle having an opening in the bottom thereof at one end and an opening in the end wall thereof registering with said bottom opening, an upwardly inclined partition arranged at the rear end of said bottom opening, a lip extending laterally from the outer face of said end wall above the opening therein, a gate valve arcuate in cross section pivotally mounted at the open end of said receptacle and lapping said lip and positioned for varying the height of said opening, and means for adjusting said valve and holding it in adjusted position.

4. A mortar spreader comprising a receptacle having an opening in the bottom thereof at one end and an opening in the end wall thereof registering with said bottom opening, an upwardly inclined partition arranged at the rear end of said bottom opening, a lip extending laterally from the outer face of said end wall above the opening therein, a gate valve arcuate in cross section pivotally mounted at the open end of said receptacle and positioned for varying the height of said opening, said end wall having a longitudinally disposed slot therein, a

headed bolt slidably mounted in said slot and having a winged nut at its outer end, a connecting element connected with said bolt and with said valve whereby said valve may be vertically adjusted and held in adjusted position.

5. A mortar spreader comprising a receptacle having an opening in the bottom thereof at one end, the end wall of said receptacle having an opening at the bottom thereof communicating with the bottom opening, an adjustable valve for controlling the height of the opening in the end wall, a slide mounted on the bottom of said receptacle for closing the opening in said bottom, a handle for actuating said slide hinged to one end thereof, and means for retaining said handle in folded position when the slide is open.

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

CASTLEMAN DAVID DOLL.

Witnesses:
FLORA MCDERMOTT,
VIRGINIA MAY RAMPP.

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