E. N. TURNER.

GROUT CARRIER.

APPLICATION FILED JAN. 22, 1915.

1,144,160.

Patented June 22, 1915.

2 SHEETS—SHEET 1.

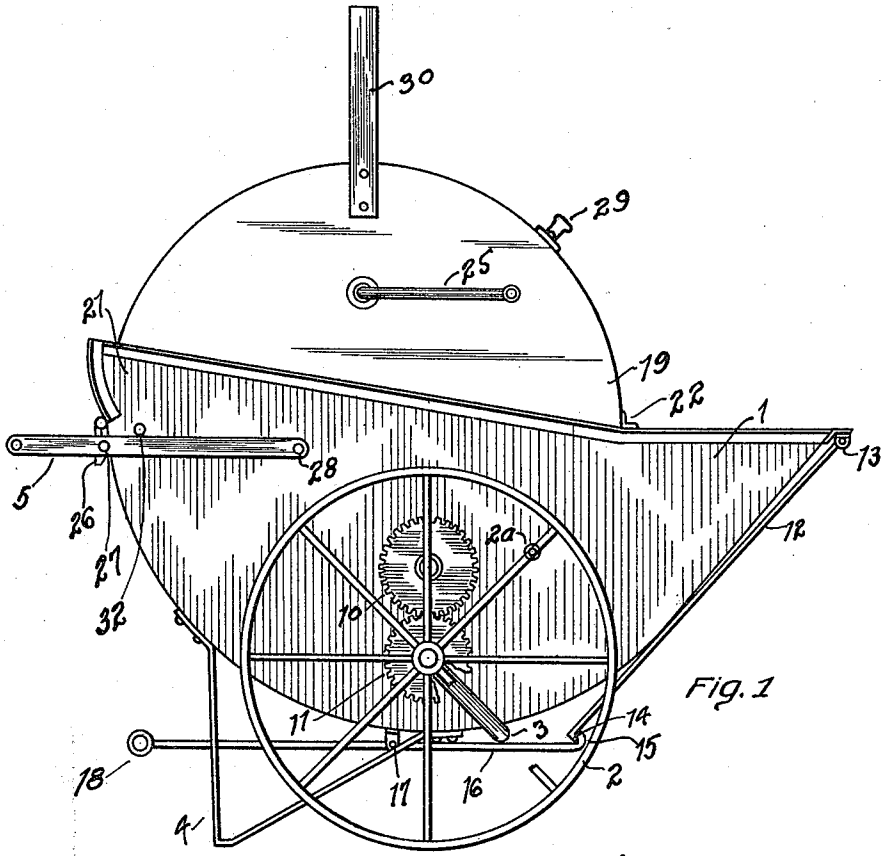


Fig. 1

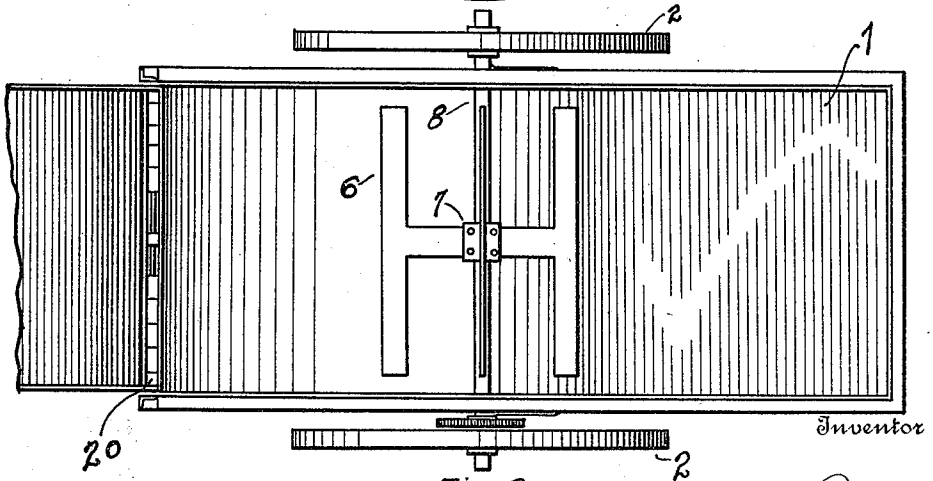


Fig. 2

Witnesses

J. C. Merkle

A. L. Phelps

Inventor

Edgar N. Turner

By

C. C. Shepherd Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON D. C.

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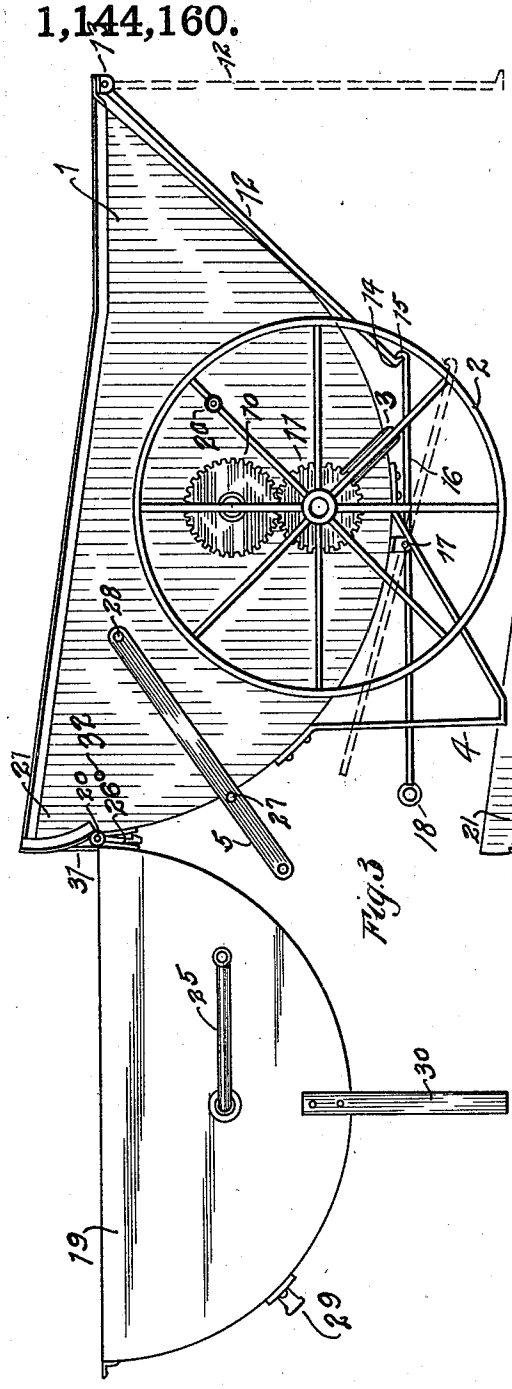


Fig. 3

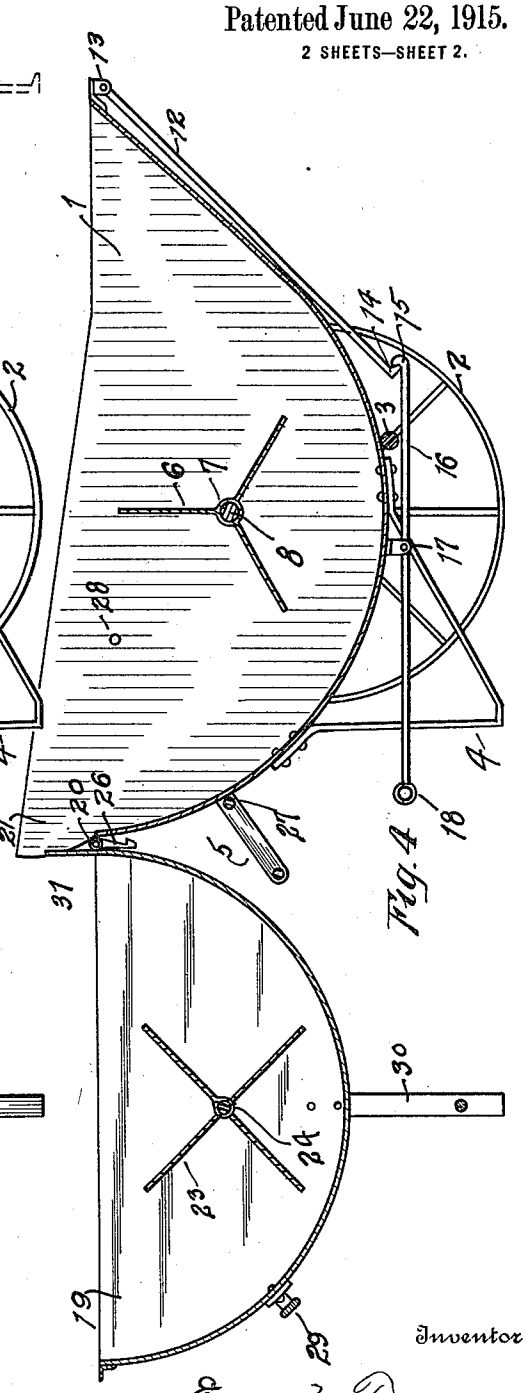


Fig. 4

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Edgar N. Turner

By

C. Shepherd Attorney

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDGAR N. TURNER, OF LOGAN, OHIO.

GROUT-CARRIER.

1,144,160. Specification of Letters Patent. Patented June 22, 1915.

Application filed January 22, 1915. Serial No. 3,848.

To all whom it may concern:

Be it known that I, EDGAR N. TURNER, a citizen of the United States, residing at Logan, in the county of Hocking and State of Ohio, have invented certain new and useful Improvements in Grout-Carriers, of which the following is a specification.

My invention relates to grout carriers of the type particularly adaptable for use by contractors, etc., when laying brick streets or such other work as may be required to be filled with the usual sand, cement and water composition known as grouting.

The main object of my invention consists in the provision of a structure of carrier embodying means whereby the various ingredients of the grout may be dry mixed and subsequently placed in the major receptacle forming the carrier and where the required amount of water is introduced. I provide this structure for the reason that sand, cement, and the other ingredients should there be any, are more efficiently mixed when in a dry state than when water is added to the same before its mixing.

A further object of my invention resides in the combination of the dry mixing structure and the wet mixing structure, this latter being so arranged that the grout may be maintained in an agitated state to insure a uniform consistency throughout its mass.

A further object of my invention resides in the peculiar mounting of the hood member, where the dry mixing is effected, and the remaining structure, this mounting being such that its hinge connection will always be protected against the grout itself and it is further so formed that the dry mixture will not spill when it is being transferred from the hood to the bowl body.

Other objects of my invention will appear after a further detailed description of the accompanying sheets of drawings, in which similar characters of reference designate corresponding parts, and in which:

Figure 1 is a side elevation of my grout carrier showing the hood member in its superposed position, Fig. 2 is a top plan view of the structure shown in Fig. 1 with the hood member swung out of superposed position, Fig. 3 is a side elevation of my carrier with the hood member swung to assume its rearward position, and, Fig. 4 is a longitudinal vertical section of the structure shown in Fig. 3.

In these drawings, the well known type of carrier is shown, the same comprising a bowl 1, to which is attached a pair of transporting wheels 2, these wheels being mounted upon the axle 3 located at a point slightly forward of the center of capacity of the bowl itself. Depending legs 4 are provided as a supporting structure when the carrier is left standing, these legs being of such length that when the handle 5 is grasped, the natural tendency will be to slightly lift the legs 4 off the ground and by a forward push the carrier itself will be moved forwardly.

The stirring device within the bowl 1 comprises a paddle wheel structure 6 rigidly attached by means of a suitable fitting 7 to a transverse shaft 8 rotatably journaled in suitable bearings carried by each side of the bowl itself. One end of this shaft rigidly carries a pinion 10, this pinion being arranged to mesh with a gear wheel 11 rigidly carried by one of the transporting wheels. It will thus be apparent that forward movement of the carrier itself will impart a rotary movement to the stirring paddle 6 by means of its geared connection. It is at times desirable to agitate this mixture, while the carrier is itself in stationary position to thereby maintain a uniform consistency of the mass. To accomplish this, I have provided a hanger member 12, which hanger member is pivoted at 13 to the forward upper end of the bowl structure, as shown. This hanger member is of a length slightly greater than the distance between the ground line and its pivot point when the carrier is resting upon its legs 4, so that when it is moved to assume a vertical position, or that position shown in broken lines in Fig. 3, the wheels 2 will be moved upwardly out of engagement with the ground to thereby facilitate the ready turning of the agitator paddle 6 by means of the hand grip shown at 2^a upon one of the wheels 2. The lower end of this hanger element is provided with a projecting lip 14, this lip coöperating with a complemental lip formation 15 carried upon one end of a latch bar shown at 16 and shown as centrally pivoted to the bottom of the bowl structure as is indicated at 17. The manner in which the locking is effected between this latch bar and the hanger 12, is clearly shown in Figs. 1, 3 and 4 and in order that an ordinary jar will not cause disengagement of the locking parts, I have provided the rear end of this latch bar with an enlargement 18 to serve in the capacity

of a counterweight. When the carrier is in stationary position and it is desired to continue the agitation of the mixture within the bowl, the rear end of the latch bar 16 may be pushed upwardly, thereby releasing the lower end of the hanger 12. A pressure downwardly upon the end of the handle 5 when it is in the position shown in Fig. 1, will then cause the entire structure to pivot about the lower corner of the rear supporting legs 4 and in this manner the hanger 12 is permitted to assume a substantially vertical position. This pivoting action about the legs 4 causes an elevation of the transporting wheels 2 and a movement of the hanger 12 to a substantially vertical position, will cause these wheels to be temporarily out of engagement with the ground, so that their manual operation is permissible. For various reasons, it is desirable that only one of these wheels be rotatably geared or connected with the steering device 6 and I have shown this connection by means of the gear and pinion 11 and 10.

In order that the ingredients forming the grout may be dry mixed, I have provided the bowl 1 with a hood member 19, this hood member being pivoted along the upper rear edge of the bowl, as shown at 20 and the rear upper portions of both sides of this bowl are continued upwardly to a somewhat higher level as is indicated at 21, to insure the correct positioning of the hood member when in the position shown in Fig. 1, these sides coöperating with the front supporting member as shown at 22. This hood member has an open top, as shown, and a rounded base portion to accommodate the rotatable mounting of a second stirring structure designated 23 and shown as being rigidly mounted upon a shaft 24, this latter being also suitably connected with a crank 25. When it is desired to thoroughly mix the ingredients prior to the addition of water, the latch shown at 26 is withdrawn from engagement with the cross bar 27 between the side bars forming the handles 5. This handle structure is pivotally mounted to the body 1, as is shown at 28 and consequently, release of the latch structure 25 will permit this handle to assume the position shown in Figs. 3 and 4. After this the handle 29 upon the hood structure is grasped and the entire hood swung rearwardly to assume the position shown in Fig. 4, whereupon the supplemental supporting structure shown in the nature of legs 30 coöperate with the hinge structure to support this hood in its lowermost position. The ingredients may then be introduced and the crank 25 rotated until they have been sufficiently mixed. After this, this mixture may be introduced into the bowl 1 by a slight elevation of the hood, but in order that this mixture will not be lost through the space formed by the hinge structure and also that it may not clog this hinge structure, I have provided the hood member with an apron 31, this apron being located adjacent the hinge connection and being so arranged that it will overlie the same when the hood is in partial elevated position. This accomplished, the handle structure 5 may again be moved to the position shown in Fig. 1, further upward movement being prevented because of the pin structure shown at 32. It will thus be apparent that I have provided a structure whereby the ingredients forming the grout can be very readily mixed prior to their being placed in the carrier body. Further, this hood structure is such that it is supported independent of its hinge connection when in its rear position as is indicated in Fig. 4. Further, when the hood has been moved to assume a superposed position as indicated in Fig. 1, it will prevent excessive loss of the mixture due to splash.

What I claim, is:

1. A grout carrier comprising a bowl body, wheels supporting said body, a hood member hingedly carried by the upper portion of said body, and stirring means rotatably mounted within said hood.

2. A grout carrier comprising a bowl body, a pair of wheels supporting said body intermediate its front and rear ends, a stirrer device rotatably mounted within said body, a hood member hingedly carried by the upper portion of said body, and a stirring device rotatably mounted within said hood.

3. A grout carrier comprising a bowl body, a single pair of wheels carried by said bowl intermediate its front and rear ends, one wheel being disposed on each side of said body, a rear support for said bowl, a stirring device within said bowl on an axis running in the same direction as the axes of said wheels, a driving connection to said device to operate it by movement of the carrier, a hood member hingedly carried by the upper portion of said body, and a second stirring device in said hood independent of said first-named stirring device.

4. A grout carrier comprising a bowl body, a single pair of wheels carried by said bowl intermediate its front and rear ends, one wheel being disposed on each side of said body, a rear support for said bowl, a stirring device within said bowl on an axis running in the same direction as the axes of said wheels, a driving connection to said device to operate it by movement of the carrier, a hood member hingedly carried by the upper portion of said body, a second stirring device in said hood independent of said first-named stirring device, and means whereby said first-named stirring device may be operated when the carrier is stationary.

5. A grout carrier comprising a bowl body, wheels supporting said body, a hood member hinged to the rear upper edge of said body, stirring means rotatably mounted within said hood, and a supporting structure for said hood in addition to its hinge connection for supporting it when it is swung out of superposed relation with said body.

6. A grout carrier comprising a bowl body, wheels supporting said body, a hood member hinged to the rear upper edge of said body, stirring means rotatably mounted within said hood, a supporting structure for said hood in addition to its hinge connection for supporting it when it is swung out of superposed relation with said body, and an apron carried by said hood adjacent its hinge connection and arranged to overlie said hinge connection.

7. A grout carrier comprising a bowl body, a pair of supporting wheels for said body, a rear support for said body, a push handle pivoted to the sides of said body, a releasable latch structure for normally holding said handle in operative position, a hood member hinged to the rear upper edge of said body, an apron carried by said hood adjacent its hinge connection and arranged to overlie said hinge connection, stirring means rotatably mounted within said hood, and a supporting structure for said hood in addition to its hinge connection for supporting it when it is swung out of superposed relation with said body.

In testimony whereof I affix my signature in presence of two witnesses.

EDGAR N. TURNER.

Witnesses:
WALTER E. L. BOCK,
A. L. PHELPS.

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