No. 887,854. PATENTED MAY 19, 1908.

A. E. SCHENCK.

CONCRETE MIXER.

APPLICATION FILED DEC. 16, 1907.

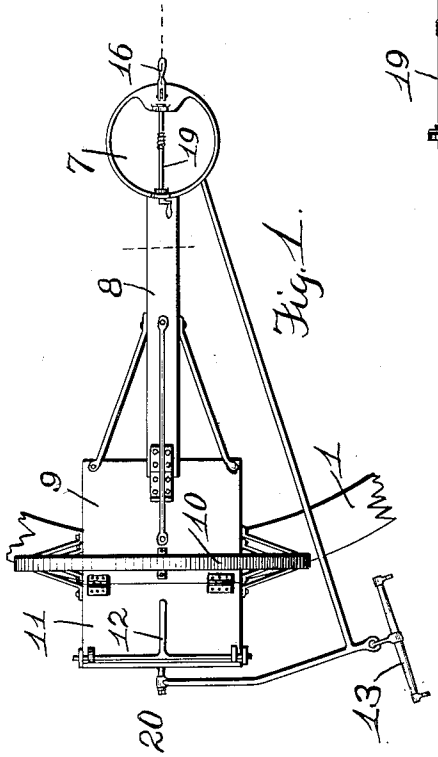


Fig. 1.

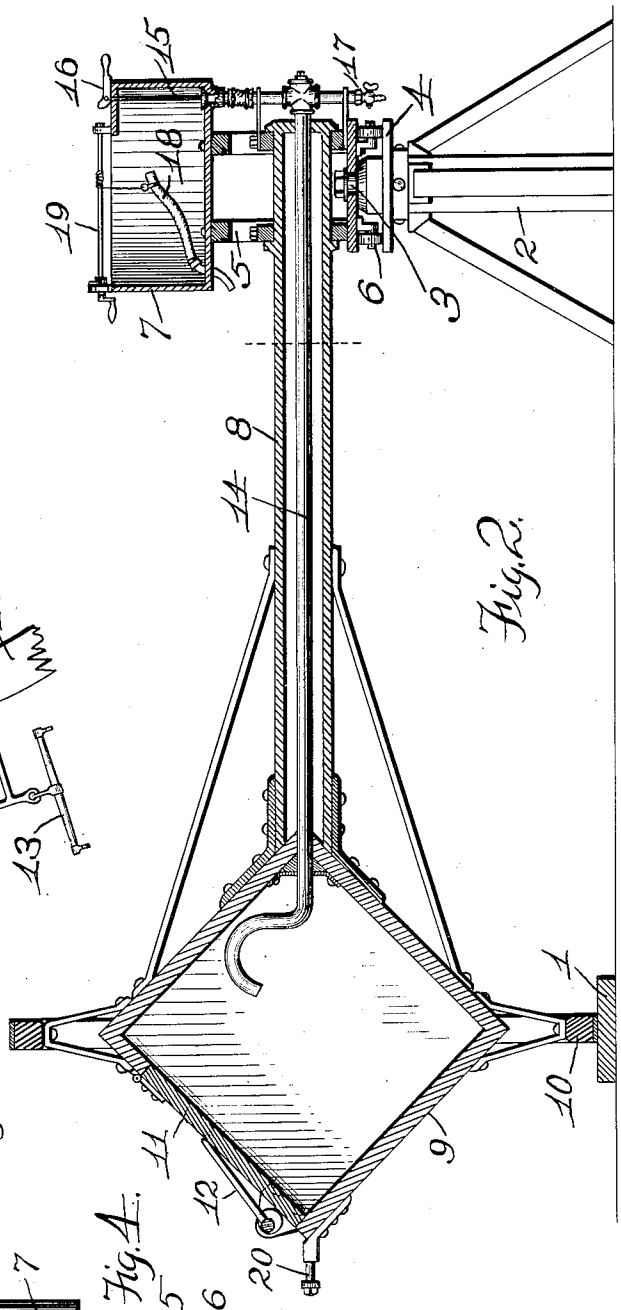


Fig. 2.

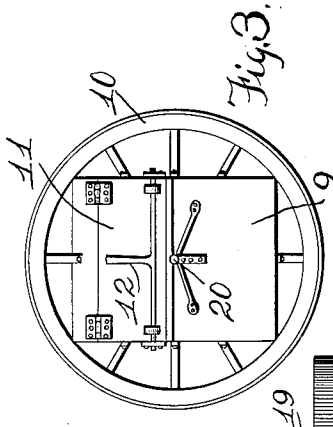


Fig. 3.

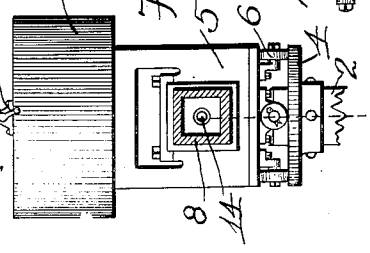


Fig. 4.

Witnesses:
Elmer R. Shipley.
M. S. Belden.

Arthur E. Schenck
Inventor
by James W. See
Attorney

UNITED STATES PATENT OFFICE.

ARTHUR E. SCHENCK, OF BETHANY, OHIO.

CONCRETE-MIXER.

No. 887,854. Specification of Letters Patent. Patented May 19, 1908.

Application filed December 16, 1907. Serial No. 406,600.

To all whom it may concern:

Be it known that I, ARTHUR E. SCHENCK, a citizen of the United States, residing at Bethany, Butler county, Ohio, have invented certain new and useful Improvements in Concrete-Mixers, of which the following is a specification.

The present improvements in concrete mixers will be readily understood from the following description taken in connection with the accompanying drawing in which:—

Figure 1 is a plan of a concrete mixer exemplifying my invention: Fig. 2 a vertical longitudinal section of the same: Fig. 3 an end elevation: and Fig. 4 a vertical transverse section. Figs. 1 and 3 are upon a smaller scale than Figs. 2 and 4.

In the drawing:—1, indicates a circular track or pathway for a wheel: 2, a fixed pivot post at the center of the pathway: 3, a vertical journal at the top of the pivot post: 4, a circular roller track fixed at the top of the post: 5, a housing mounted to turn on the journal 3: 6, anti-friction rollers carried by the housing and engaging the track 4 and serving to support the housing and the parts carried by it and to reduce the friction of motion as the housing turns upon the post: 7, a water-tank supported by the housing: 8, an arm having its inner end horizontally journaled in the housing, its outer end extending to near the circular pathway: 9, a box rigidly secured to the outer end of the arm, this box being cubical in form and so secured to the arm that the axis of the arm will be parallel to two sidewalls of the box and at an angle of about forty-five degrees to the other sidewalls of the box: 10, a wheel-rim encircling the box and having its axis coincident with that of the journal at the inner end of the arm, this wheel-rim being rigidly secured to the box and resting its periphery upon the circular pathway or track: 11, a hinged door in one of the outer sidewalls of the box: 12, a latchment to secure this door firmly in closed position: 13, a draft-rig secured to the forward side of the arm and box and adapted to have a horse hitched to it for drawing the box around in its circular path: 14, a water-pipe extending through the arm and having its outer end open to discharge into the box, its inner end being connected with the tank: 15, a valve controlling communication between the tank and the pipe: 16, a handle for controlling the valve: 17, a drain cock connected with pipe 14 to serve in draining that pipe and the tank: 18, an overflow pipe disposed in the tank, and illustrated as being of flexible character so that its inner end may be raised or lowered: 19, a winch mounted on the tank and connected with the overflow pipe and serving in adjusting the latter: and 20, a trunnion on the outer extremity of the box, in axial line with the arm, the draft-rig being hitched to this trunnion.

With the parts in the position indicated in Fig. 2, the door is to be unlatched and opened up and the dry material for the concrete is to be placed in the box, after which the door is to be closed and secured. The horse is now started whereby the box is swept around in its circular path, its contents being thoroughly tumbled and mixed as the box rotates, and while this is going on water is permitted to pass from the tank into the box. The flow of water to the contents of the box is controlled by valve handle 16, and judgment and experience may be employed in delivering the water to the box. The height of the inner end of the overflow pipe may be so adjusted that the tank will hold only that quantity of water proper for a given charge of dry material in the box, and in such case the device becomes self-measuring, as far as the water is concerned.

When the contents of the box have been properly moistened and mixed then the affair is stopped in a position the reverse of that shown in Fig. 2 so that the door will be downward. The door is now to be unlatched, whereupon it will fall open and the contents of the box may be allowed to flow out into barrows or other receivers.

I claim:—

1. A concrete mixer comprising a pivot-post, a housing vertically journaled thereon, a horizontal arm journaled in the housing, a cubical box secured to the outer end of the arm, a door at the outer portion of the box, a wheel-rim secured to and encircling the box, and a draft rig attached to the outer portion of the box, combined substantially as set forth.

2. A concrete mixer comprising a pivot-post, a housing vertically journaled thereon, a horizontal arm journaled in the housing, a box secured to the outer end of the arm, a door at the outer portion of the box, a wheel-rim secured to and encircling the box, a tank supported by the housing, a pipe extending from the tank through the arm and into the

box, and a valve for controlling the flow of water through the pipe, combined substantially as set forth.

3. A concrete mixer comprising a pivot-post, a housing vertically journaled thereon, a horizontal arm journaled in the housing, a box secured to the outer end of the arm, a door at the outer portion of the box, a wheel-rim secured to and encircling the box, a tank supported by the housing, a pipe extending from the tank through the arm and into the box, a valve for controlling the flow of water through the pipe, and an adjustable overflow pipe connected with the tank, combined substantially as set forth.

4. A concrete mixer comprising a pivot-post, a housing vertically journaled thereon, a horizontal arm journaled in the housing, a cubical box secured to the outer end of the arm in such relation thereto that four of its sidewalls will be at angles to the axis of the arm, a door at the outer portion of the box, a wheel-rim secured to and encircling the box, and a draft rig attached to the outer portion of the box, combined substantially as set forth.

ARTHUR E. SCHENCK.

Witnesses:
PAUL M. HOOVEN,
M. S. BELDEN.