C. E. SHERO.

CUT-OFF FOR CONCRETE MIXERS.

APPLICATION FILED MAR. 31, 1911.

999,525. **Patented Aug. 1, 1911.**

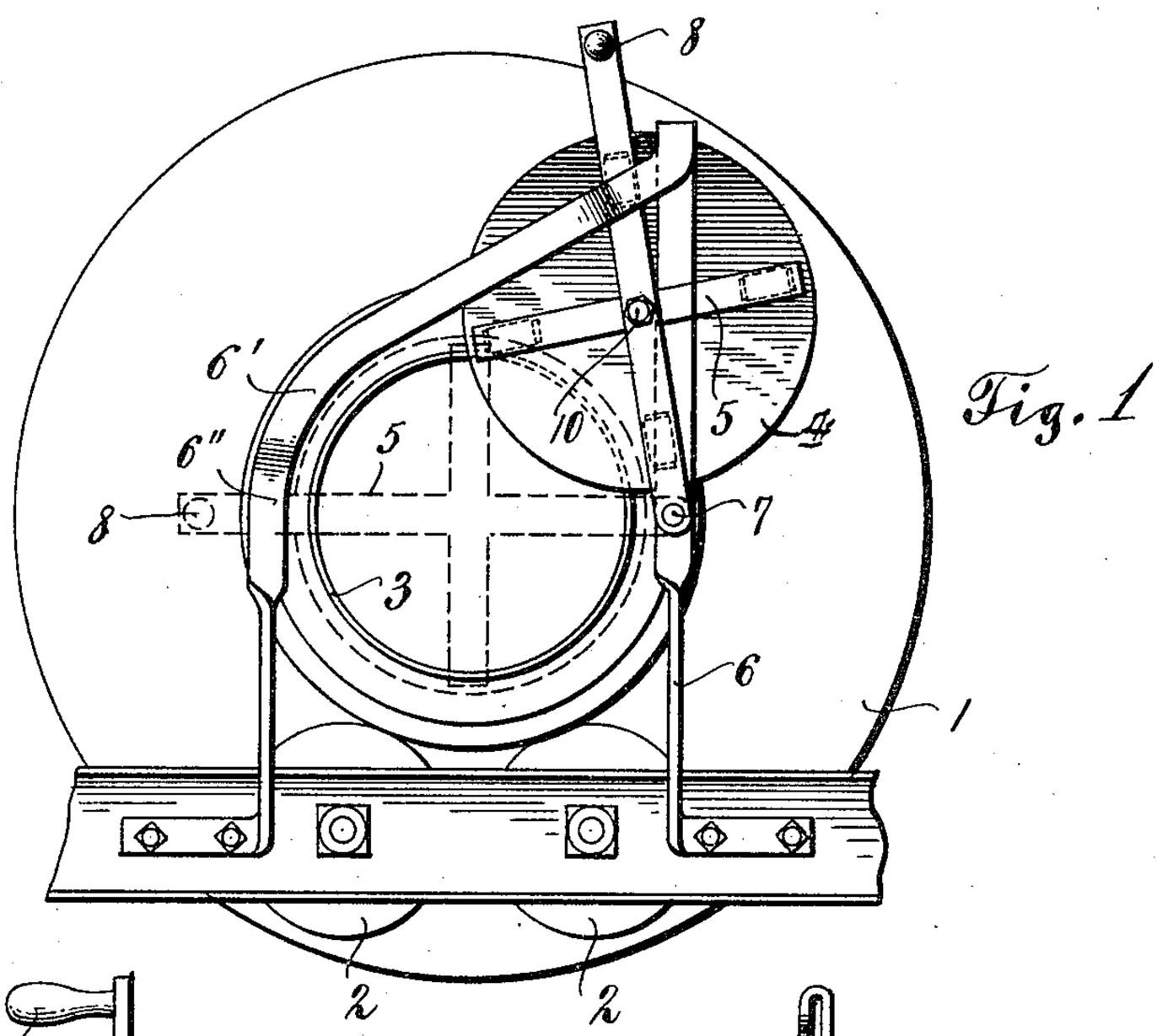

Fig. 1

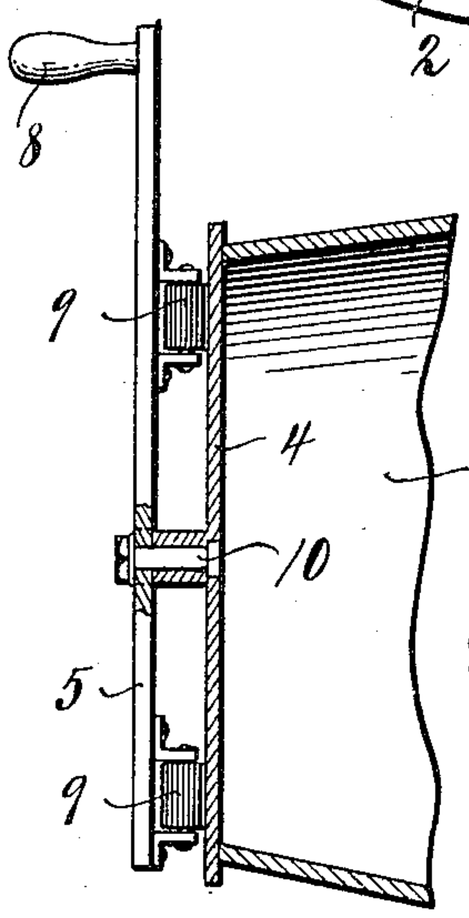

Fig. 3

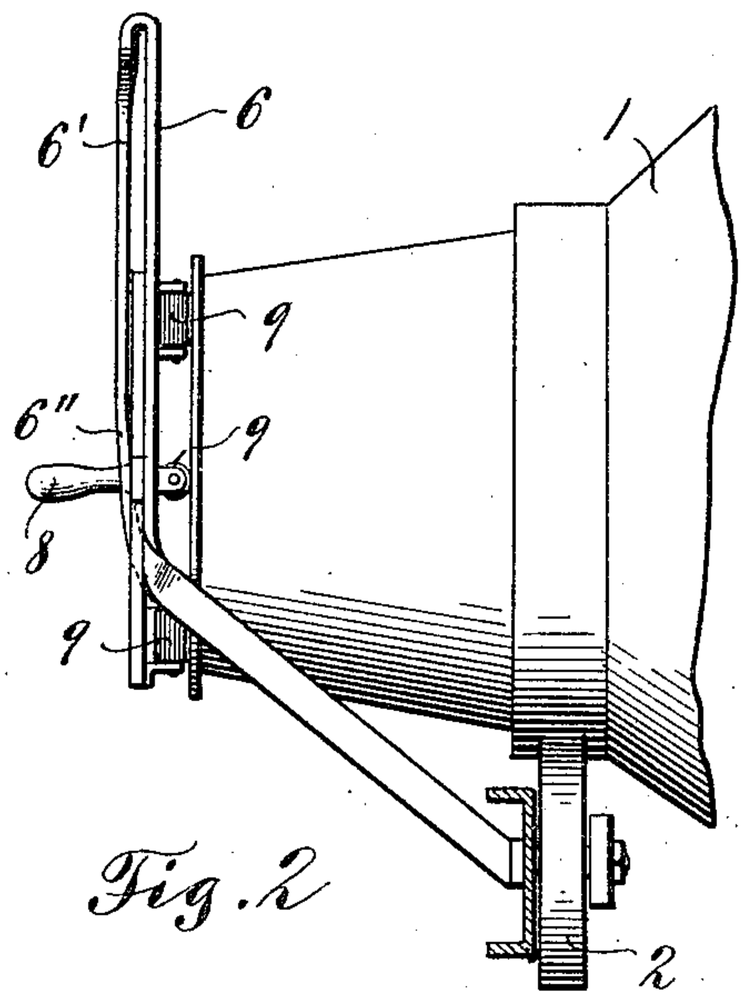

Fig. 2

WITNESSES:

E. Larson

Edw. Walton, Jr.

INVENTOR

C. E. Shero

BY Robert Robb

J. H. Robb

Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CLARENCE E. SHERO, OF AMARILLO, TEXAS.

CUT-OFF FOR CONCRETE-MIXERS.

999,525. Specification of Letters Patent. Patented Aug. 1, 1911.

Application filed March 31, 1911. Serial No. 618,130.

To all whom it may concern:

Be it known that I, CLARENCE E. SHERO, a citizen of the United States, residing at Amarillo, in the county of Potter and State of Texas, have invented certain new and useful Improvements in Cut-Offs for Concrete-Mixers, of which the following is a specification.

The present invention comprises a cut-off valve, gate or door, particularly designed for use in connection with rotary concrete mixers, or similar machines.

The invention consists primarily in the provision of a cut-off for the discharge of the mixer, so constructed and mounted as to rotate with the mixer, notwithstanding that it is supported entirely separate therefrom.

More specifically speaking, the invention consists of a cut-off rotatable upon a supporting frame and movable by the latter into operative and inoperative positions, the cut-off being adapted to frictionally engage the mixer at the discharge end of the latter, being thus caused to rotate therewith. Anti-friction bearings are interposed between the cut-off and the support carrying the same.

For a full understanding of the present invention, reference is to be had to the following description and to the accompanying drawings, in which—

Figure 1 is an end view looking into the discharge end of a rotary mixer, the cut-off being raised into open position and dotted lines showing its position when the discharge of the mixer is closed thereby; Fig. 2 is a side elevation, the mixer being broken away; Fig. 3 is a sectional view on an enlarged scale.

Throughout the following detail description and on the several figures of the drawings, similar parts are referred to by like reference characters.

In the drawings, 1 denotes the hollow body of a rotary mixer, the discharge end of which is mounted upon suitable rollers 2 by which the movement of the mixer is facilitated in operation.

3 denotes the discharge of the mixer, which is of any conventional type, but adapted to be closed by the cut-off valve, door or gate 4. The cut-off 4 will be of the same general shape as the discharge opening 3, being circular in the present instance, and supported by means of a frame 5 pivoted to a supporting frame 6, at 7. The frame 5 consists of angularly extending arms, one of which is projected beyond the edge of the cut-off and provided with a handle 8, whereby the cut-off may be raised or lowered to open or close, respectively, the discharge 3.

Interposed between the arms of the frame 5 and the outer portion of the cut-off 4 are the anti-friction rollers 9. A journal 10 connects the central portion of the cut-off 4 with the central portion of the frame 5.

In use, when the cut-off 4 is lowered from the position shown in Fig. 1 to the dotted line position, closing the discharge 3, the handle arm of the frame 5 operates in contact with the inner side of the lateral extension 6′ of the frame 6 which latter is suitably secured at its ends to the main frame of the device. The member 6′ is inclined inwardly, as shown at 6″ forming a cam which acts on the handle arm of the frame 5 to force the parts 4 and 5 toward the mixer as the cut-off is lowered. When closing the discharge 3, the cut-off is held by the parts 6″ of the frame 6 in frictional contact with the mixer and rotates therewith very freely by reason of the interposition of the rollers 9 between the parts 4 and 5.

Having thus described the invention, what is claimed as new is:

1. In combination, a rotary mixer having a discharge, a support separate from said mixer, a cut-off carried by said support, and means connecting said cut-off with the support permitting rotation of the cut-off with the mixer.

2. In combination, a rotary mixer having a discharge, a supporting frame independent of the mixer, a cut-off movable toward and from the discharge and mounted on said supporting frame, and a connection between the supporting frame and cut-off, permitting rotation of the latter with the mixer when frictionally engaged with the discharge portion of the mixer.

3. In combination, a rotary mixer, a cut-off therefor, a frame separate from the mixer supporting said cut-off, means for moving said frame to carry the cut-off into operative and inoperative positions, and means for forcing the cut-off into engagement with the mixer when the former is moved into an operative position.

4. In combination, a rotary mixer, a cut-off therefor, a frame separate from the mixer and supporting said cut-off, means for moving said frame to carry the cut-off into operative and inoperative positions, and a frame separate from the mixer comprising a portion inclined toward the mixer to engage with the cut-off and force the same into engagement with the mixer when the cut-off is moved into an operative position.

5. In combination, a rotary mixer, a cut-off therefor engageable with the mixer to rotate therewith, means separate from the mixer for moving said cut-off into and out of operative position, and anti-friction bearings between the cut-off and its supporting means.

6. In combination, a rotary mixer, a cut-off therefor, a frame movable to carry the cut-off into operative and inoperative positions, and anti-friction bearings between said frame and the cut-off permitting rotation of the cut-off with the mixer when engaged therewith.

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

CLARENCE E. SHERO.

Witnesses:
J. L. PENSY,
J. V. POTTINGER.