A. D. MOSBY.

DISCHARGE DEVICE FOR CONCRETE MIXERS.

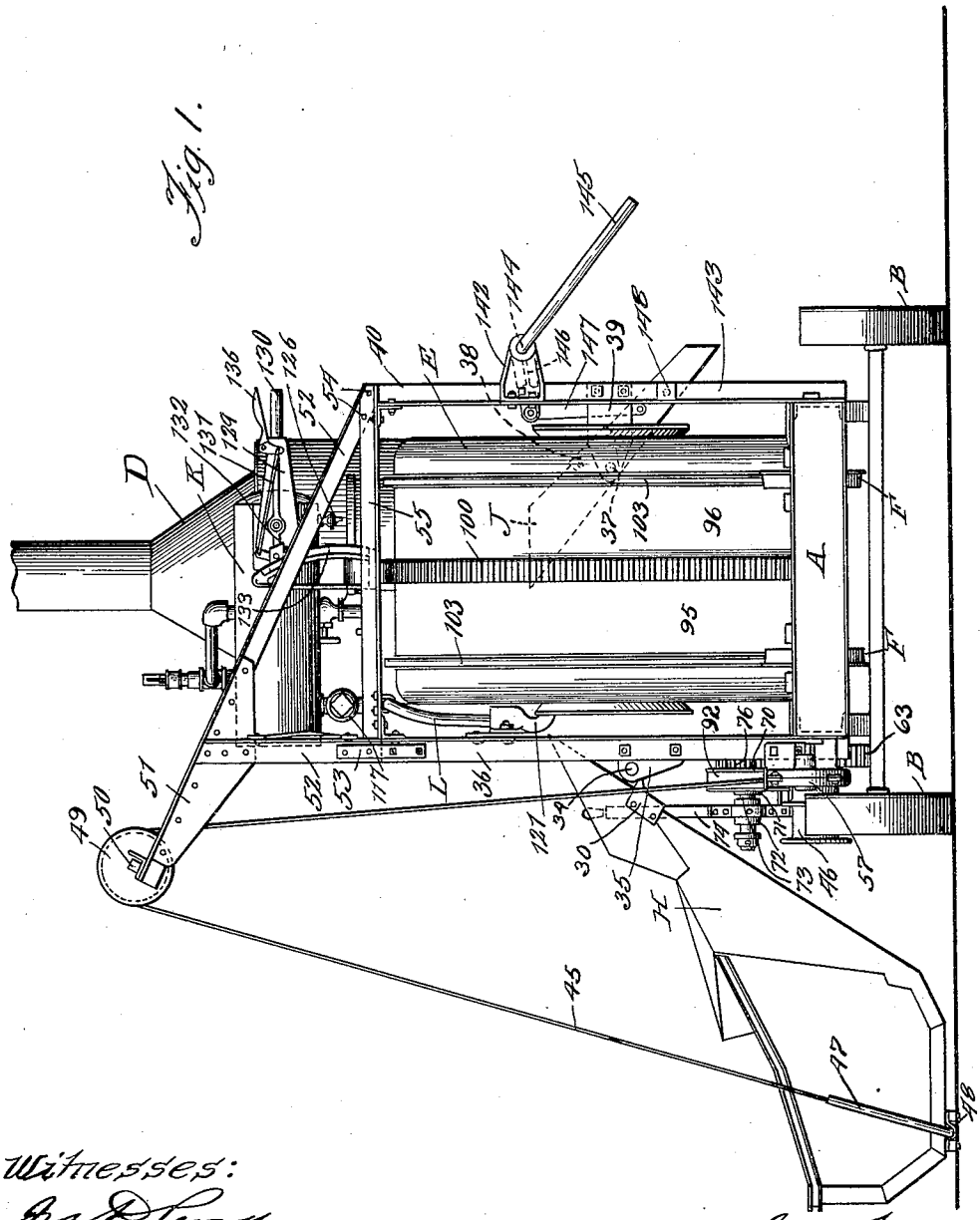
APPLICATION FILED FEB. 23, 1911.

1,067,539.

Patented July 15, 1913.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:

Inventor:

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2 SHEETS—SHEET 2.

Fig. 2.

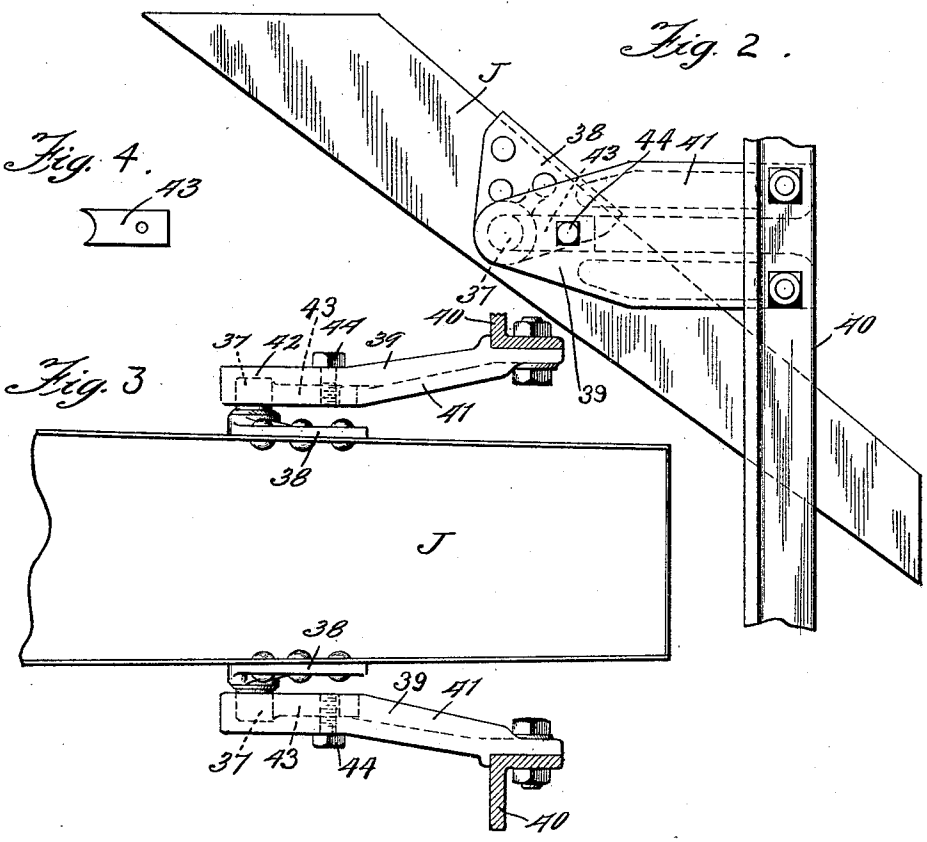


Fig. 4.

Fig. 3

Witnesses:

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UNITED STATES PATENT OFFICE.

ALFRED D. MOSBY, OF CHICAGO, ILLINOIS, ASSIGNOR TO MARSH-CAPRON MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DISCHARGE DEVICE FOR CONCRETE-MIXERS.

1,067,539. Specification of Letters Patent. Patented July 15, 1913.

Application filed February 23, 1911. Serial No. 610,154.

To all whom it may concern:

Be it known that I, ALFRED D. MOSBY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Discharge Devices for Concrete-Mixers, of which the following is a specification.

My invention relates to a concrete mixing machine of the revoluble drum type, and the invention has for its object to provide a discharge spout of novel and improved construction which is pivotally mounted in the discharge opening of the drum by the use of certain devices which make it possible to readily remove the chute from the drum as occasion may demand, when, for example, the drum is cleaned.

The preferred form of the invention is shown in the accompanying drawings, wherein—

Figure 1 is an end elevation of the mixer in connection with which the chute of my present invention is illustrated. Fig. 2 a fragmentary elevation of the discharge spout and associated parts. Fig. 3 a plan view of these parts; and Fig. 4 a detail view of one of the bearing blocks used to hold the pivots of the chute in position.

Like characters of reference indicate like parts in the several figures of the drawings.

Referring to the drawings, A designates a horizontal framework or truck supported on the wheels B.

E designates the mixing drum which is rotatably supported on the wheels F on the truck A.

H is the charging hopper which receives the ingredients of the concrete and dumps the same into one side of the mixing drum.

J is the discharge spout arranged so that it projects into the interior of the mixing drum, intercepts the concrete, and discharges the same out of the drum.

K is a water measuring tank which discharges through a pipe L leading into the mixing drum.

The construction of the charging hopper H shown in the drawings and the means employed for raising and lowering it are described and claimed in my copending application Serial No. 651,913, filed September 29th, 1911. The water measuring device K is made the subject of another application for patent, namely, Serial No. 651,914, filed September 29th, 1911, the above mentioned applications being divisions hereof.

The construction of the drum and the means for supporting and driving the same are not claimed herein, this subject-matter having been described and claimed in an application which is a division hereof, filed May 8, 1913, Serial No. 766,330. For this reason these devices are not more particularly described in the present specification.

The discharge spout J is provided on opposite sides with pivots 37 formed on castings 38 riveted to the spout (Figs. 3 and 4). These pivots are rotatably supported on the bracket members 39 bolted to the uprights 40. The bracket members 39 are formed with channels 41 terminating in circular recesses or sockets 42. Considerable difficulty has been experienced in removing and replacing the discharge spouts of concrete mixers of the type shown herein. It is frequently necessary to remove the spout in order to clean the drum. By constructing the body of the spout of sheet metal, the structure has sufficient elasticity to permit the pivots 37 to slide back and forth in the channels 41. The pivots spring back into the sockets 42 when the discharge spout is replaced. Preferably the pivots are kept in place by bearing blocks 43 (Fig. 5) which seat in the channels 41 and are held against the pivots by means of the bolts 44.

Mounted in brackets 142 carried on an upright 143 and on one of the uprights 40 is a rock shaft 144 having a handle 145. The rock shaft carries rigidly thereon the arm 146 connected by means of the links 147 with the discharge spout J. On the upright 143 is a clip 148 which is elastic enough to allow the handle 145 to pass over it when the rock shaft is turned so as to tilt the outer end of the spout upward and which holds the parts in this position.

I claim:

1. In apparatus of the character described, the combination of a sheet metal chute, pivots attached to opposite sides of the chute and brackets provided with channels terminating in sockets for the pivots which are deeper than the channels, the distance between the bottoms of the channels being less than that between the extremities of the pivots and the chute being flexible transversely so that it may be sprung into place.

2. In apparatus of the character described, the combination of a sheet metal chute, pivots attached to opposite sides of the chute, brackets provided with channels terminating in sockets for the pivots which are deeper than the channels, the distance between the bottoms of the channels being less than that between the extremities of the pivots and the chute being flexible transversely so that it may be sprung into place, and retaining blocks adapted to be secured in said channels against said pivots, substantially as described.

3. In apparatus of the character described, the combination of a chute provided with pivots, supports for said pivots provided with channels, and removable blocks for retaining the pivots at the inner ends of said channels.

4. In apparatus of the character described, the combination with a sheet metal chute, of a support for the same, one of said elements being provided with pivots and the other being formed with channels terminating in sockets to receive the pivots, which sockets are deeper than the channels, and the chute being flexible transversely so that it may be sprung into place on the support.

ALFRED D. MOSBY.

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