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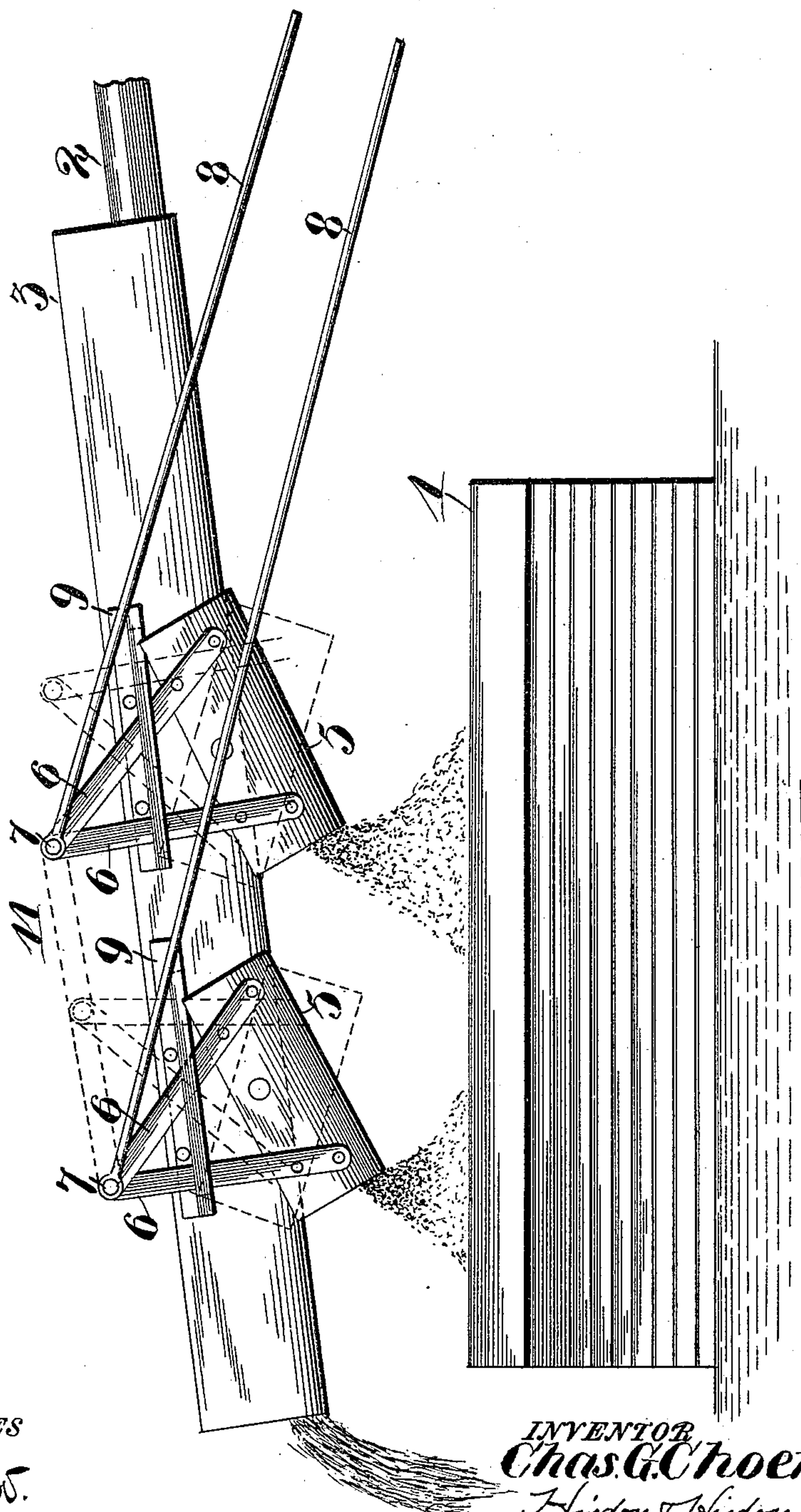
2 Sheets—Sheet 1.

C. G. CHOEN.
ATTACHMENT FOR SAND CONVEYERS.

No. 460,630.

Patented Oct. 6, 1891.

Fig. 1.



WITNESSES

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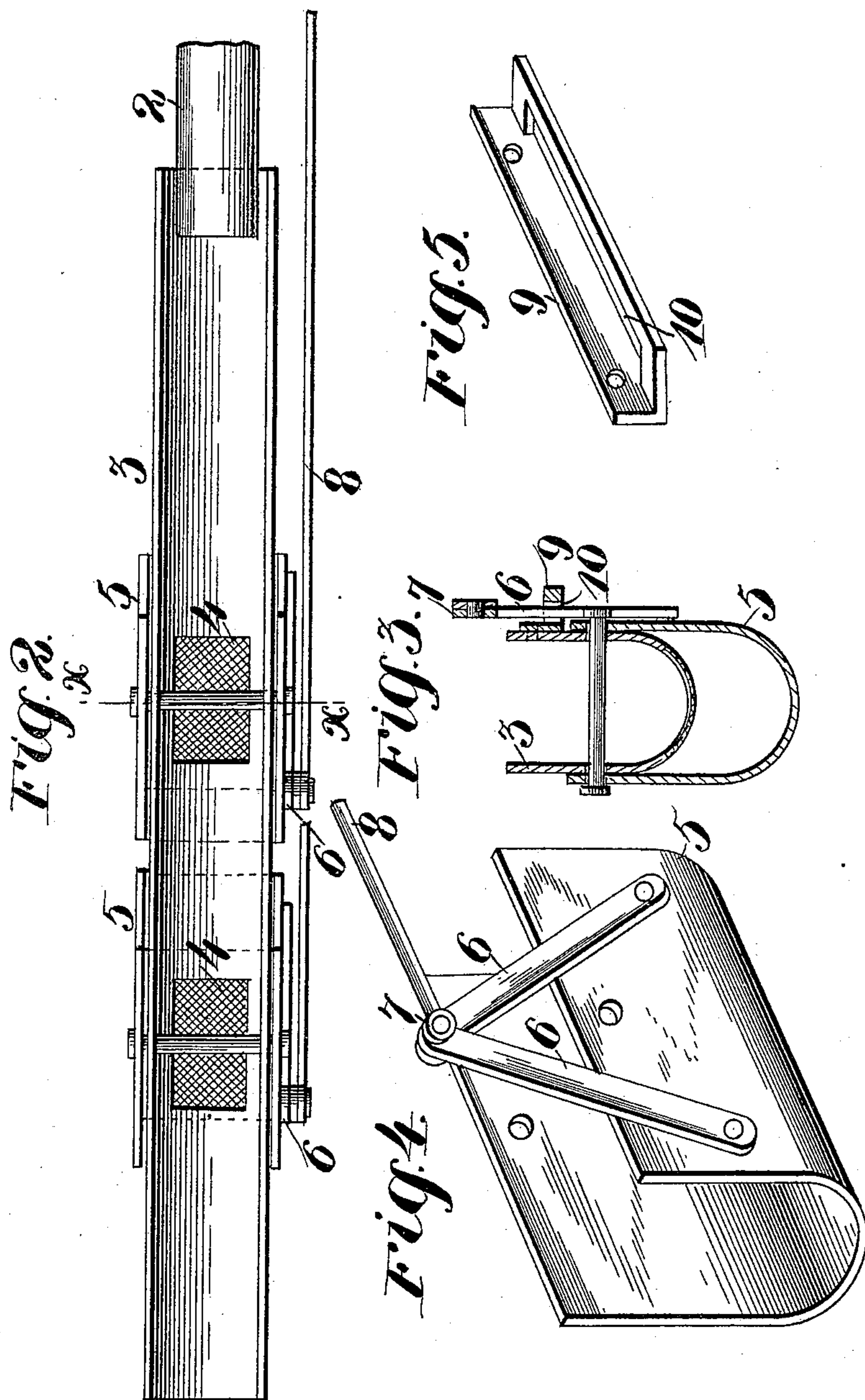
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WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLES G. CHOEN, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO
BART S. ADAMS, OF SAME PLACE.

ATTACHMENT FOR SAND-CONVEYERS.

SPECIFICATION forming part of Letters Patent No. 460,630, dated October 6, 1891.

Application filed May 16, 1891. Serial No. 393,045. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. CHOEN, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Attachments for Sand-Conveyers, for Distributing the Sand in Loading Barges, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in attachments for sand-conveyers, for distributing the sand in loading barges, &c.; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and designated in the claims.

In the drawings, Figure 1 is a side elevation of a sand-conveyer, showing my invention functionally applied. Said figure also is an end view of a sand-barge of ordinary construction. Fig. 2 is a top plan view of a sand-conveyer with my invention applied to the same. Fig. 3 is a cross-section taken on the line $x x$ of Fig. 2. Fig. 4 is a perspective view of a U-shaped sand-distributing pan, which is the essential feature of my invention, and its attachments; and Fig. 5 is a perspective view of right-angular guide in which the arms secured to the U-shaped pan move when the pan is operated.

The object of my invention is to construct a device or devices to distribute or shift the sand to different parts of the barge while loading the same, thus avoiding the necessity which has heretofore existed of mounting the barge and distributing or shifting the sand by the agency of a shovel or similar device. The devices which I employ for this purpose are adapted to be operated from the boat.

To fully comprehend the operation of my invention it is first necessary to conceive (referring to Fig. 1) that the boat which carries the sand-pump lies along to the right of the barge, and the sand-distributing pans are adapted to be operated from said boat.

With these preliminary statements relative to the object and use of my invention I will now proceed to describe the same in detail.

Referring to the drawings, and especially referring to Fig. 1, 1 indicates a sand-barge of

ordinary construction, and to the right of said barge, for a thorough comprehension of my invention, the boat which carries the sand-pump is conceived to be located.

2 indicates the exhaust-pipe from the sand-pump, the normal position of which is in the end of the sand-conveyer 3. The sand-conveyer 3 embodies the ordinary construction of sand-conveyers, and in its normal position extends in an inclined position transversely across barge 1, as illustrated in Fig. 1. Said conveyer is provided with sieves 4, of the ordinary construction, through which the sand passes. It may be premised in this connection that my invention does not relate to the construction of the conveyer, and therefore I will not further elucidate the same. Located directly beneath sieves 4 and pivotally secured to conveyer 3 are U-shaped distributing-pans 5, to which my invention especially relates. Said pans 5 are pivotally secured to the side of conveyer 3, either by a bolt passing through suitable perforations formed in said conveyer and pan (which pivotal connection is illustrated in the drawings) or by means of a supplemental arm the ends of which are pivotally connected to said conveyer and pans, which construction, however, is not illustrated. Secured to one side of said U-shaped distributing-pan 5 are arms 6. Said arms, or, rather, the upper ends of said arms, converge, and are secured together by means of a bolt 7. Pivotaly secured to said arms by means of said bolt 7 is an operating-rod 8, the same being provided with a handle-hole at its free end, which is not illustrated. Said operating-rod 8 passes back on the boat, which carries a sand-pump, and can be operated therefrom. Said arms 6 are located in a right-angular guide 9, the same being provided with an elongated slot 10, in which said arms are adapted to move. Said guide 9 is secured to the side of the sand-conveyer in any suitable and mechanical manner.

It may be observed that each sand-conveyer is provided with as many U-shaped distributing-pans as it (conveyer) has sieves; or, in other words, a distributing-pan should be located under each sieve. It may be further observed that the pans may be operated independently of each other, or the mechanism

could be so contrived that the same could be operated simultaneously, as shown in dotted lines in Fig. 1, in which figure a bar 11 is shown, in dotted lines, connecting arms 6.

5 It can be readily perceived by referring to Fig. 1 that when the pans occupy the position as illustrated the sand will be thrown or distributed to the left on the barge 1 and when the pans occupy the position as shown in dotted lines the sand will be thrown or distributed to the right on barge 1; or, in other words, by a proper operation of the pans the sand may be thrown and distributed to any or on all parts of the barge.

15 Heretofore in distributing the sand on a barge it was necessary for the operator to mount the barge and distribute the sand thereon by means of a spade or other similar device.

20 Having fully described my invention, what I claim is—

1. In a device for loading sand, the combination, with an inclined sand-conveyer having a perforated bottom, of a U-shaped pan, 25 a bolt passing centrally through the said pan and through the said conveyer, pivoting the said pan below the perforation in the latter,

and a handle pivoted to the said pan and extending therefrom to a distance, whereby the inclination of the said pan may be altered as 30 may be necessary to properly turn the load, substantially as described.

2. In a device for loading sand, the combination, with an inclined sand-conveyer having a perforated bottom, of U-shaped pans, 35 bolts passing centrally through the said pans and through the said conveyer, pivoting the said pans below the perforations in the latter, and a handle pivoted to each of the said pans and extending therefrom to a distance, whereby the inclination of the said pans may be altered as may be necessary to properly trim the load, substantially as described.

3. The combination of a U-shaped pan 5, arms 6, secured to the same, a guide 9 for said 45 arms, and an operating-handle 8, pivotally secured to said arms, substantially as set forth.

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

CHARLES G. CHOEN.

Witnesses:

C. K. JONES,
ED. E. LONGAN.