

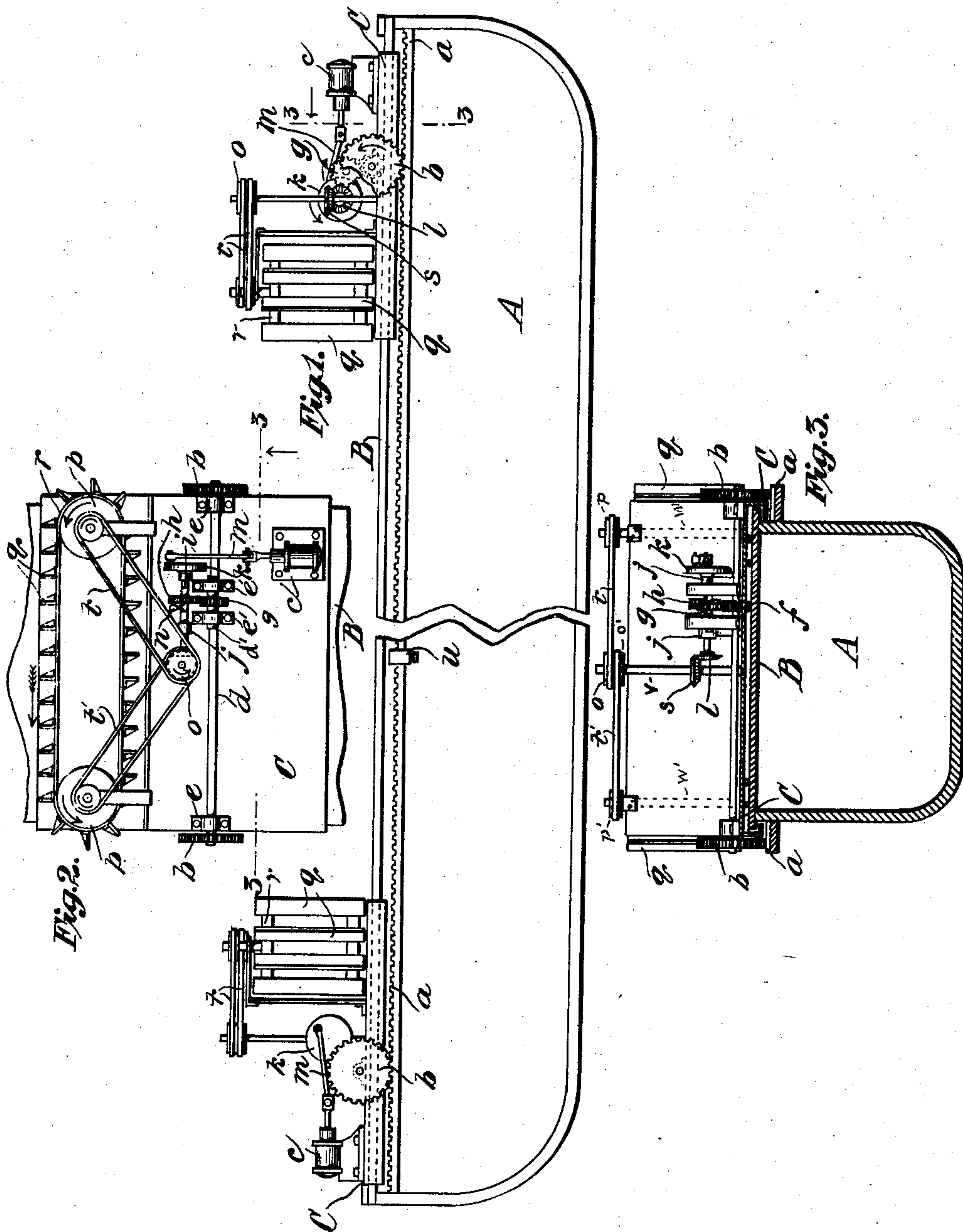
No. 744,523.

PATENTED NOV. 17, 1903.

W. Y. GAMBEE & M. A. MCCARTHY.
DECK SCOW.

APPLICATION FILED APR. 4, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM Y. GAMBEE AND MORRIS A. MCCARTHY, OF NEW YORK, N. Y.,
ASSIGNORS TO Balsa TRANSPORTATION COMPANY, A CORPORATION
OF NEW YORK.

DECK-SCOW.

SPECIFICATION forming part of Letters Patent No. 744,523, dated November 17, 1903.

Application filed April 4, 1903. Serial No. 151,071. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM Y. GAMBEE and MORRIS A. MCCARTHY, citizens of the United States, and residents of the city, county, and State of New York, have invented certain new and useful Improvements in Deck-Scows, of which the following is a specification.

The object of our invention is to provide a scow, barge, or other vessel to be used for carrying a deck-load of earth, stones, waste, or other material and to discharge the same either for land-reclaiming purposes or at sea, as may be preferred.

To this end our invention consists in providing such vessel with a discharging apparatus, or maybe one at each end, by means of which the deck-load is seized and moved sidewise over the side of the vessel, where it falls into the surrounding water, the apparatus being fed constantly forward until the entire deck-load is removed.

Where a single discharging apparatus is employed, it of course is fed the entire length of the load; but where two are employed they are preferably fed toward each other until they meet amidships.

Various forms of discharging apparatus may be employed for this purpose; but the form which we consider the best is shown in the accompanying drawings, in which—

Figure 1 is a side view broken away in the center. Fig. 2 is a plan of the discharging apparatus only. Fig. 3 is a vertical section on line 3 3 of Figs. 1 and 2.

Same letters indicate similar parts in the different drawings.

A is the body of the vessel, and may be either self-propelling or not, as preferred.

B is the deck.

C C are carriages on which the discharging apparatus is mounted. It is not necessary to employ more than one discharging apparatus; but obviously it is preferable to employ two, because they can work from opposite ends without interfering with each other. The platform of the carriage C projects over the side of the boat and turns in under the gunwale, as shown in Fig. 3, whereby great steadiness is secured.

The carriage is fed backward and forward by means of the stationary racks *a a*, which run lengthwise of the vessel and with the teeth of which pinions *b b*, carried on each side of the carriage, mesh. The dredging apparatus consists of a motor *c*, mounted at any suitable place on the platform and communicating motion not only to feed the carriage forward and back, but also to operate the discharging devices.

The advance and retreat of the carriage is brought about as follows: The pinions *b b* are mounted on the shaft *d*, journaled in standards *e e*, affixed to the carriage. This shaft carries the gear *f*. Motion is communicated to the gear *f* from the gear *g*, which is mounted on the shaft *d'*. This shaft is journaled in the standards *e' e'* above the shaft *d*. A drive-shaft *i*, carrying gear *h*, is mounted in the posts *j j* and carries at one end the drive-wheel *k* and at the other the beveled gear *l*. The drive-wheel is operated from the motor from the connecting-rod *m*. It is obvious that the revolution of the gear *h*, meshing with gear *g*, will operate the gear *f* and the shaft *b* and move the carriage forward or back according to the direction of the revolution of the shaft. As the feeding of the shaft is only intended to be intermittent, as hereinafter explained, we mount the gear *h* loosely on the shaft *i* and provide a clutch *n*, by which it can be picked up when occasion requires.

The discharging of the deck-load is brought about as follows: A system of belting and stripping-blades is arranged so as to be operated by the beveled gear *l*. The teeth of the gear *l* mesh with the beveled gear *s*, mounted upon the vertical shaft *v*, journaled on the carriage-platform and carrying at its upper end the pulleys *o o'*. The upper pulley is connected by belting *t* with the pulley *p*. The lower pulley *o'* is connected by belting *t'* with the pulley *p'*. The pulleys *p p'* are mounted, respectively, on the vertical shafts *w w'* and revolve in unison. Around these shafts *w w'* are placed drums (not shown) adapted to move the scraping-chain *r*, which is provided with the vertical projecting blades *q*. This chain is of substantial and

rigid character, being composed, preferably, of metallic plates linked together to allow sufficient play to turn around the ends of the drums. As the shaft *v* is revolved by the gear *s* the system of the pulleys and belting is set in operation and the scraping-chain cuts into the deck-load, forcing ahead of the blades *q*, until it falls over the side of the vessel. As soon as the blades have removed all of the load that is within reach the carriage is fed forward, so as to cut away more of the load, and this is continued until the deck is clear.

It will of course be understood that the blades *q* stand vertically and extend from nearly the deck-level sufficiently high to cut off what may be called a "vertical slice" of the entire height of the load. It is also to be

understood that the deck is only loaded between the two discharging-carriages when two are employed, and a stop *u* is provided to limit the forward motion of the carriage.

We claim—

A deck-scow or other vessel provided with a discharging apparatus which consists of a carriage adapted to move lengthwise of the vessel, and a cutting and discharging device mounted thereon, and adapted to cut into the deck-load and force it over the side of said vessel where it is allowed to fall.

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Witnesses:

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