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DUMP SCOW

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DUMP SCOW

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My invention relates to a new and useful improvement in a dump scow adapted for use in transporting various articles and particularly for use in transporting mud and like material which is obtained in a dredging operation and which it is desired to transport to a specified location for dumping.

With dump scows as now used, the scow is provided with a plurality of pockets each pocket having a bottom formed from swingably mounted doors which may be released to open position for dumping purposes. To dump the load from the scow requires considerable time and labor operation as each individual set of doors requires individual operation. The present invention has as its object the provision of a dump scow so arranged and constructed that a dumping of the load may be easily and quickly effected regardless of the number of material receiving cavities or pockets formed in the scow.

It is another object of the present invention to provide a dump scow formed from a pair of swingably mounted sections so arranged and constructed that when brought into normal operative position the pockets or cavities in the scow will be closed at their bottom ends and when swung to open position a dumping of the contents of the pockets or cavities may be effected.

Another object of the invention is the provision in a scow of this class of a pair of hingedly mounted sections which serve to form the main body of the scow and means for moving these sections into closed relation and retaining the same in such position.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawings which form a part of this specification, and in which,

Fig. 1 is a top plan view of the invention.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a fragmentary sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a fragmentary view taken on line 4—4 of Fig. 1.

Fig. 5 is a fragmentary view taken on line 5—5 of Fig. 1.

In the drawings I have illustrated the invention provided with a pair of adjacent pockets or cavities. It is to be understood that the number of pockets or cavities in the scow may be varied depending upon the length of the scow itself, the size of the pockets, and the purposes and uses of the scow.

The main body of the scow comprises a pair of hinged sections similarly constructed and duplicates of each other. Each section comprises the bottom 8, the outer side wall 9, the top 10, the inclined bottom 11 and the end wall 12. The sections are formed to provide the necessary pockets or material receiving compartments, and in the drawings I have illustrated a pair of these compartments separated by the bulk heads 13 and 14 which are hingedly connected at their upper ends by the hinge 15. These compartments are determined by end walls 16 and the inclined wall 17 which inclines downwardly from the top of the section inwardly toward the edge thereof which determines the center of the scow. These sections are hinged together by the hinges 18 and 19.

When the sections are in the form shown in full lines in Fig. 2, the material receiving pockets are closed at their lower ends and when these sections are swung into the position shown in dotted lines in Fig. 2, the pockets are opened at their lower ends permitting a dumping of the material contained in the material receiving pockets. The bulk heads 13 and 14 are formed hollow, and passing down the bulk head 13 is a cable 21 which is fastened at one end to the section on which the bulk head 14 is mounted. Passing down the bulk head 14 is a cable 20 and fastened at its end to the section on which the bulk head 13 is mounted. Mounted on the section which carries the bulk head 13 is a cable shield comprising the top 22, the side wall 23, and the upright wall 24. This upright wall 24 is adapted to engage the plate 25 mounted on the section carrying the bulk head 14.

Mounted on the wall 17 is a bracket 26 on which is rotatably mounted the pulley 27. A bracket 28 is mounted beneath the plate 25 and a pulley 29 is rotatably mounted on the bracket 28. A cord 30 extends downwardly in the shield 22 and passes around the pulleys 27 and 29 and is fastened at its end to the section carrying the bulk head 14. A similar arrangement is made for protecting the cord 32. Mounted on the top 10 of each of the sections is a winch arrangement whereby a winding and unwinding of the cables may be effected to move the sections to open and closed position.

A vertically extending shaft 33 is provided with a worm 34 which meshes with a worm wheel 35 on a shaft 36 journaled in the brackets 37. Fixedly mounted on this shaft 36 is a worm 36' meshing with a worm 36'' fixedly mounted on the shaft 38'. Fixedly mounted on this shaft 38' is a winding drum 38 to which one end of the cable 30 is attached. One end of a cable 39 is also attached to the drum 38 and the opposite end attached to the other section.

At the center of the scow at each side is a similar arrangement including the shaft 33' which serves to drive by the worm arrangement the drum 40 to which one end of the cable 21 is attached. Mounted on the shaft 33 is a pulley 41 and mounted on the shaft 33' is a pulley 42 around which the cable 43 passes. This cable is extended to the tug boat which draws the barge and is connected with a suitable source of power so that the shaft 33 and 33' may be rotated in either direction as desired. The winding and unwinding mechanism at both sides of the scow will, of course, be simultaneously similarly operated and upon an unwinding of the cables 30 and 21 the cable 39 will be wound to swing the scow sections into the dotted line position. A reverse winding of the drums 38 and 40 will cause an unwinding of the cable 39 and the cables 21 and 30 to again bring and secure the scow sections to the closed position shown in full lines in Fig. 2.

With a scow constructed in this manner, a durable structure is provided which may be economically and quickly operated to dump the contents and again moved to operative position for reception of another load.

While I have illustrated and described the preferred form of construction of my invention, I do not wish to limit myself to the precise details of structure shown but desire to avail myself of such variations and modifications as may come within the scope of the appended claim.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

A dump scow of the class described, com-

prising: a pair of sections in engaging relation; means for hingedly connecting said sections together at their adjacent upper edges, said sections being free from swinging apart at their lower edges, and each of said sections being provided with a cavity aligning with a cavity in the other section to provide a material receiving pocket; a pair of winches mounted adjacent the outer edges of each of said sections; a cable wound on each of said winches and connected at one end to the lower edge of the section opposite to the section on which its winch is mounted; a shield for covering each of said cables; pulleys mounted on each of said sections adjacent the lower edge thereof, said cable being passed around said pulleys; and a plate carried by one of said sections and serving as a shield for said pulleys.

In testimony whereof I have signed the foregoing specification.

AMBROSE BEATON.