D. BROBSTON.

Dredging Scrapers.

No. 142,988. Patented September 23, 1873.

Fig. 1.

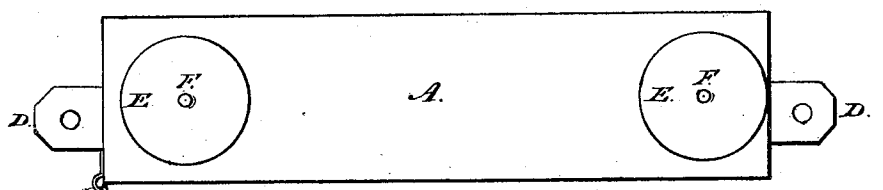


Fig. 2

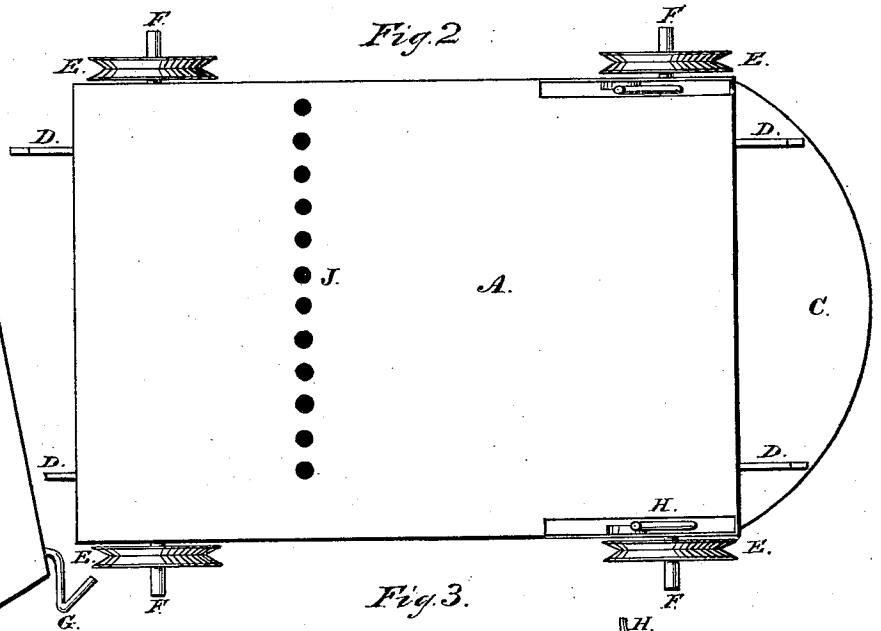
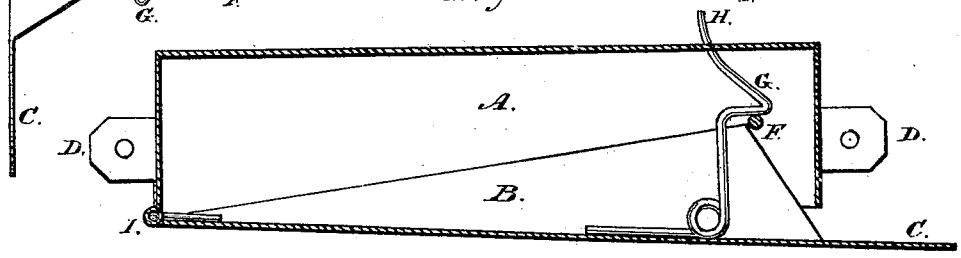


Fig. 3.



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DAN BROBSTON, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN DREDGING-SCRAPERS.

Specification forming part of Letters Patent No. **142,988**, dated September 23, 1873; application filed August 1, 1872.

To all whom it may concern:

Be it known that I, DAN BROBSTON, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sand-Scrapers, of which the following is a full and exact description, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a side view with the scraper open for discharging; Fig. 2, a top or plan view; and Fig. 3, a longitudinal vertical section.

The object of my invention is to construct a scraper or scoop for scraping sand under water; and its nature consists in providing the scraper with a box which will collect and retain the sand, and allow the water to escape, and in providing suitable means for opening the box.

In the drawings, A represents the cover, case, or box; B, the scraper; C, its projecting part; D, loops or catches for attaching chains or cords to operate it under water; E, wheels; F, axle; G, catches; H, portion of the catch projecting above the case when it is closed; I, hinge; J, holes in case for the discharge or passage of water.

I make my scraper of boiler-iron, by preference; but it may be made of any other suitable material, and it is made of a size suited to the power to be used in operating it. For operating by steam I make it eight feet long without the projection C, and four feet in width, and about a foot high. The front axle passes through the case A, and supports on the inside the scraper B C by means of the hooks or catches G. These catches G are spring-catches, as shown; but, if desired, they may be made solid and hung on pivots, and provided with separate springs. These catches are so arranged as to allow the scraper B C to fall six inches below the front of the case A, which forms a passage for the sand into the box. As the scoop is drawn along, the water passes out at the holes J and through the openings provided for operating the catches, leaving the sand collected in the inside. If this scoop were drawn to the shore without any provision for raising it, it would cut the bank or shore badly, and make its landing and discharge difficult. In order to avoid this I lay a tram-way on the shore, and project it into the water about twelve feet, or other suitable distance, to prevent shore-cutting, so that when the box is filled and drawn ashore the wheels E pass onto the tram-way, out of the water, and sufficiently far to dump the sand into a wagon or heap by opening the box, as shown in Fig. 1. A cross-beam or projecting pins may be made to strike the upper end H of the catches G, so as to open the box at the proper time. The wheels E are made broad on the tread, and should be arranged in size so that the tread of the wheel will be above the bottom of the case A, so that the scraper B C will only cut to a definite depth, which I prefer should be six inches.

What I claim as new is as follows:

1. The hinged scoop or shovel B C, in combination with the case A, substantially as and for the purpose specified.

2. The combination of the spring-catches G with the case or box A and scoop B C, substantially as and for the purpose set forth.

DAN BROBSTON.

Witnesses:
E. A. WEST,
O. W. BOND.