

H. McCARTY.
RIVER SCRAPER.

No. 3,978.

Patented Apr. 1, 1845.

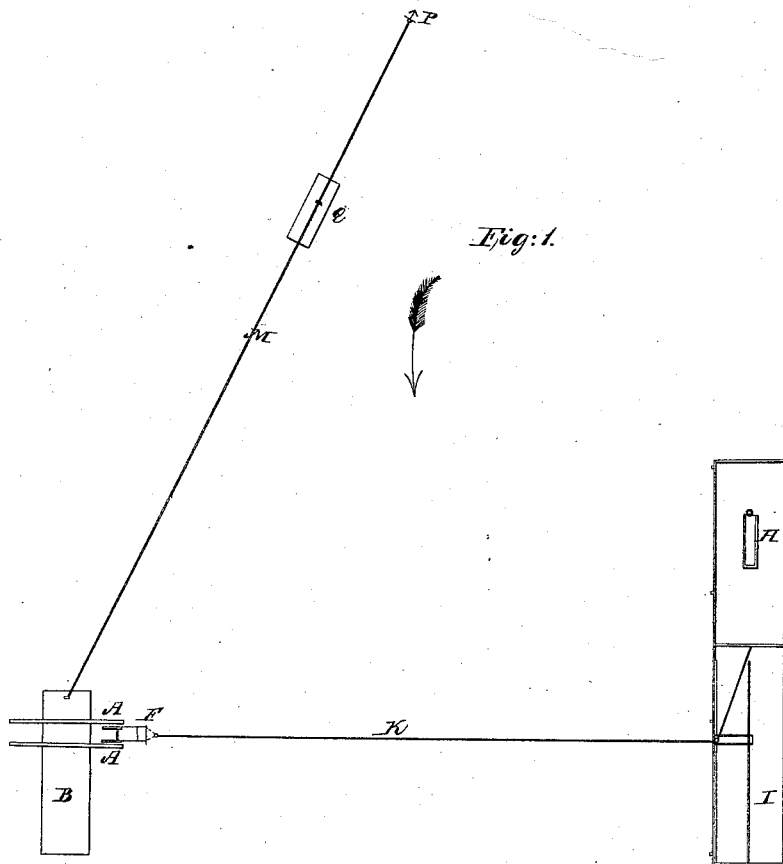


Fig: 1.

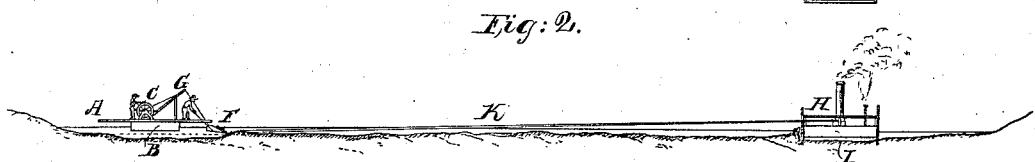
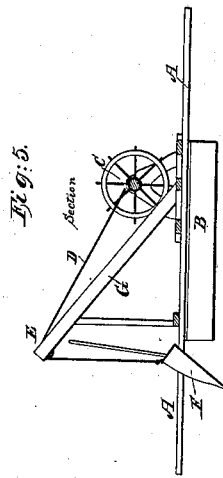
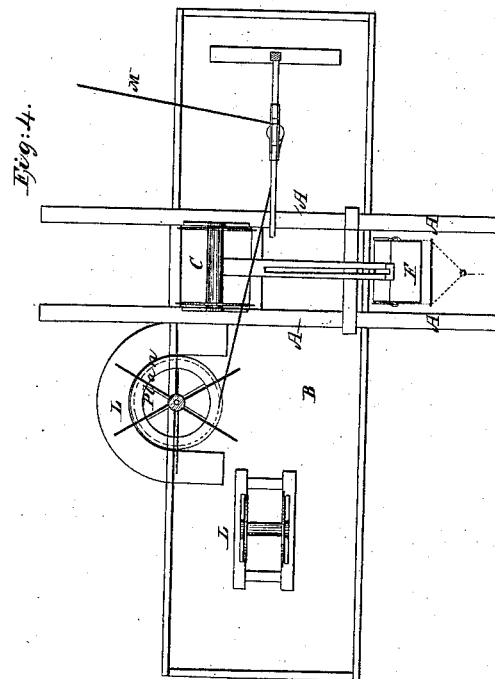
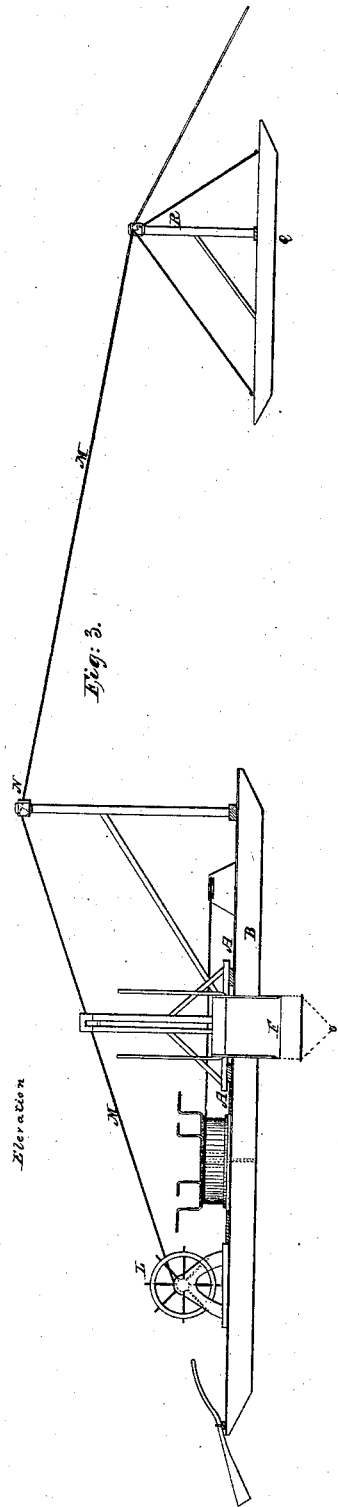


Fig: 2.

H. McCARTY.
RIVER SCRAPER.

No. 3,978.

Patented Apr. 1, 1845.



UNITED STATES PATENT OFFICE.

HENRY McCARTY, OF PITTSBURGH, PENNSYLVANIA.

MODE OF OPERATING FLOATING SCOOPS OR EXCAVATORS FOR DREDGING OR DEEP-ENING AND WIDENING CHANNELS OF RIVERS, &c.

Specification of Letters Patent No. 3,978, dated April 1, 1845.

To all whom it may concern:

Be it known that I, HENRY McCARTY, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Machine for Scraping the Beds of Rivers for Improving the Channels, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a top view of the vessel containing the scoop and of the vessel containing the engine for operating the same. Fig. 2 is an elevation of ditto. Fig. 3 is a side elevation of the vessel containing the scoop and of the float supporting the line leading to the anchor. Fig. 4 plan of the scoop, and vessel containing it. Fig. 5 section of ditto.

The nature of this invention and improvement consists in a certain new and useful combination and arrangement of parallel transverse ways A A placed upon a floating vessel B of the requisite size and strength, upon which ways is placed a windlass C for working (by means of a rope or chain D and pulley E) a scoop or scraper F for scraping the bed of the river, the pulley being let into the upper end of an inclined beam G formed into the vessel. These parallel ways extend over on either side of the vessel sufficiently far for the men to manage the scoop with effect and ease. The handles of the scoop are made long enough to reach the bed of the river from the platform of the vessel.

The scoop is worked or drawn out in the act of scooping or scraping by means of a steam engine H placed upon a vessel I floating parallel and near the vessel containing the scooping machinery, a chain K leading from the scoop to the engine.

There is another windlass L upon the first mentioned vessel used for moving said vessel up or down stream around which is passed a rope M leading over a pulley N in the top of a post O at the bow of the vessel to an anchor P placed up stream in any convenient place. This rope is held above the surface of the water by means of a float Q upon which is placed a post R having a pulley in its top over which the rope M is carried.

To operate with this machine the vessel containing the scoop and power to work it are brought in proper positions to perform the work desired.

The scoop F is then let down to the bed of the river by unslacking the rope on the windlass C first described, the men having hold of the handle of the scoop guiding it to the spot from whence it is desired to remove the earth. The steam engine H on board the other vessel (anchored by pile anchors) is then started which by means of the axle winds up the chain and draws the scoop and the earth therein and the vessel containing the machinery of the scoop and the men managing it to the place where it is desired to deposit the earth; the men then raise the handles of the scoop and discharge it of its contents. The scoop is then raised above the surface of the water, the axle of the steam engine upon which the chain is wound unshipped and the chain paid out, the action of the current carrying back the vessel containing the scoop and windlass to its former position. The operation is then repeated if necessary or the vessel is advanced for a new or fresh scoop and in this manner the operation is carried on until the channel be sufficiently deepened. The vessel is drawn up stream by the windlass L and rope M leading to the anchor P.

What I claim as my invention and which I desire to secure by Letters Patent is—

The before described mode of scraping the bottoms of rivers by operating a floating scoop by power machinery placed in a separate vessel anchored on the opposite side of the river, said floating scoop being attached to an anchor up stream, so that the current will carry back the scoop to the opposite side of the river at the termination of every operation of the said scoop for a repetition of the action of the scoop, the vessel containing the engine being moved up or down stream as the work progresses by the power of the engine, as described.

HENRY McCARTY.

Witnesses:

WM. P. ELLIOT,
ALBERT E. JOHNSON.