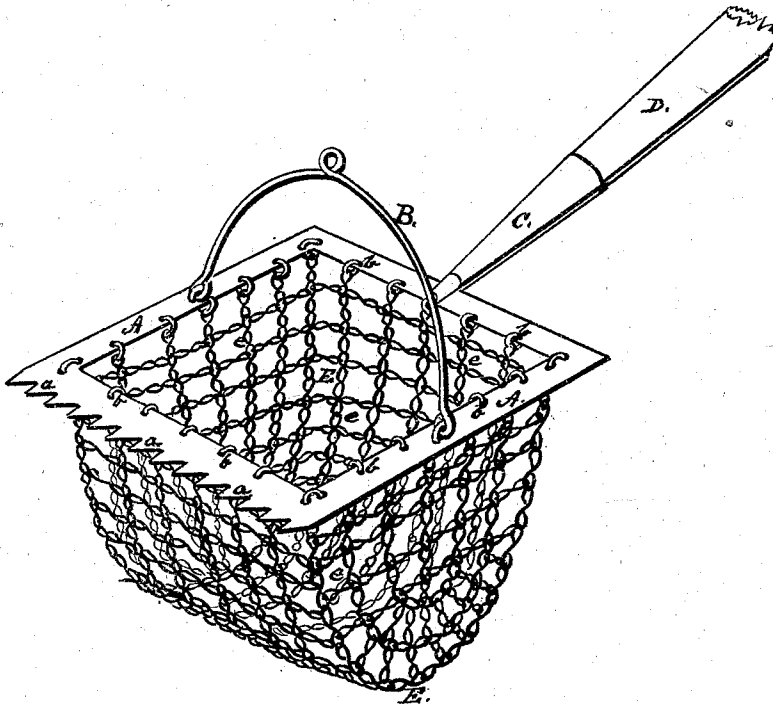


R. STILES.

Scoops for Raising Sunken-Coal.

No. 138,541.

Patented May 6, 1873.



Witnesses,

A. H. Poole
A. S. Yerrigo

Inventor,

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UNITED STATES PATENT OFFICE.

ROBERT STILES, OF CINCINNATI, OHIO.

IMPROVEMENT IN SCOOPS FOR RAISING SUNKEN COAL.

Specification forming part of Letters Patent No. **138,541**, dated May 6, 1873; application filed April 2, 1873.

To all whom it may concern:

Be it known that I, ROBERT STILES, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in a Scoop for Raising Coal from Sunken Barges, &c.; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 represents a perspective view of my invention.

My invention relates to dredging or lifting coal out of the water; and it consists of a square metal frame provided with a socket on one side, into which a handle of any required length may be secured for guiding and operating the same, the frame being balanced centrally on a bail, to which a rope or chain is attached to let it down and lift up the coal, the forward edge being serrated for digging, and the bucket or sack being made of chains woven together for scooping up and draining the coal, as will be hereinafter more fully described.

A A is a metal frame having one edge serrated, *a a a*, with series of holes *b b b*, into which the chains are secured to form the sack

E. B is the bail for lowering and raising the scoop. C is the socket, and D is the handle for guiding and operating the implement. *ee e* are chains woven together in such a manner as to make a bag or sack to receive, lift up, and drain a quantity of coal from a sunken barge and place it in another by attaching the scoop to a rope or chain to be operated by a windlass, rope and tackle, or other suitable mechanism, the handle D being used to manipulate the scoop E for charging the same as it is drawn forward by the bail B, and also for guiding and discharging the contents after being raised out of the water.

What I claim is—

The chain-sack E, in combination with the metal scoop-frame A, serrated edge *a a*, bail B, socket C, and handle D, constructed and arranged to operate as and for the purpose set forth.

In testimony whereof I hereunto subscribe my name.

ROBERT STILES.

Witnesses:

ISAAC B. MATSON,
WM. PRICE.