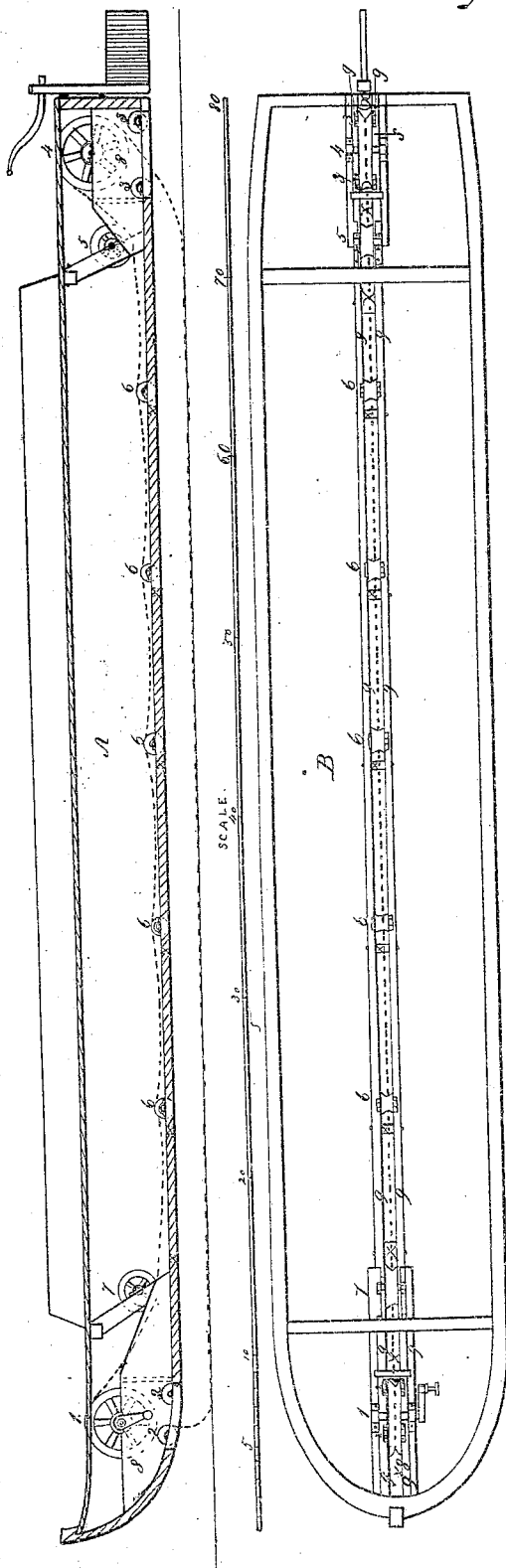


W. Leavenworth.

Propeller.

No. 1. 126.

Patented April 18. 1839.



Witnesses,
A. G. Whitteley
O. A. Shudley.

Inventor:
William Leavenworth.

UNITED STATES PATENT OFFICE.

WILLIAM LEAVENWORTH, OF NEW YORK, N. Y.

MODE OF PROPELLING CANAL AND OTHER BOATS.

Specification of Letters Patent No. 1,126, dated April 18, 1839.

To all whom it may concern:

Be it known that I, WILLIAM LEAVENWORTH, of the city of New York, in the county and State of New York, have invented a new Method of Propelling Canal and other Boats; and I do hereby declare that the following is a full and exact description.

I apply an endless chain over a pulley at the bow of the boat, then through the bottom of it to the bed of the canal or river and extend it to the stern, where it again passes through it, and over another pulley to the bow pulley or drawing wheel; the gravity of the chain with its adhesion upon the bottom of the canal or river, serves as an anchor, so that a steam engine, or other power propels the boat, by causing the driving-pulley to render the chain.

To enable others skilled in the art, to make and use my invention, I will more particularly describe the method of constructing the same.

I prefer a single chain, marked thus --- in the drawing annexed, to pass over the driving pulley or wheel near the bow No. 1, then through an opening in the bottom of the boat, (in which I place friction wheels, 2, 2,) to the bed of the canal or river, and extend it upon the same to the stern, where I again pass it through an opening in the bottom of the boat, with friction wheels 3, 3, over the large pulley 4, then under the restraining

pulley 5, to the bottom of the boat, then over the bearing pulleys 6, 6, 6, and under the pulley 7, to the driving wheel No. 1, to which I attach the propelling power, and for a single chain, is simply a V sheave. Around the openings in the bottom of the boat, I construct trunks, 8, 8, of sufficient height, to prevent the water entering the boat; I prefer two keelsons 9, 9, and place the bearing pulleys between them. If preferred two or more chains may be used, either single or connected by bars, or links, or a chain, or chains, rope or ropes, thong or thongs, with weights, clogs, feet, or grapplers attached thereto, may be used within, or outside of the boat; or a twin boat may be used, and the apparatus applied between them, if preferred.

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

The method of propelling canal and other boats, by means of an endless chain, passing through the bottom of the boat, and resting on the bottom of the canal, its weight forming an anchorage, against which, any motive power may be exerted, for the purpose of propelling the boat, by drawing in the chain, in the manner above described.

WILLIAM LEAVENWORTH.

Witnesses:

SAMUEL WHITTELSEY,
CHARLES A. WHITTELSEY.