

W. KEELER.

Improvement in Endless-Chain Propellers.

No. 131,450.

Patented Sep. 17, 1872.

Fig. 1.

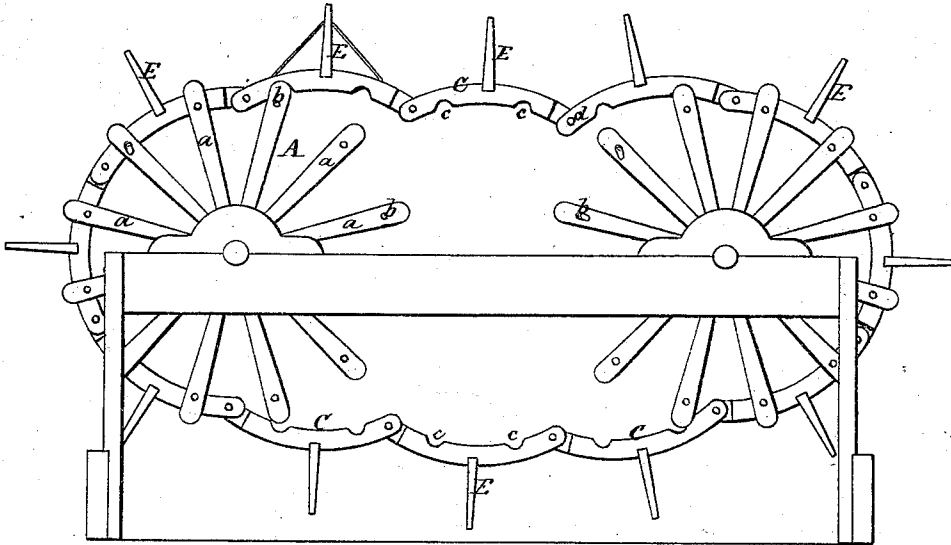
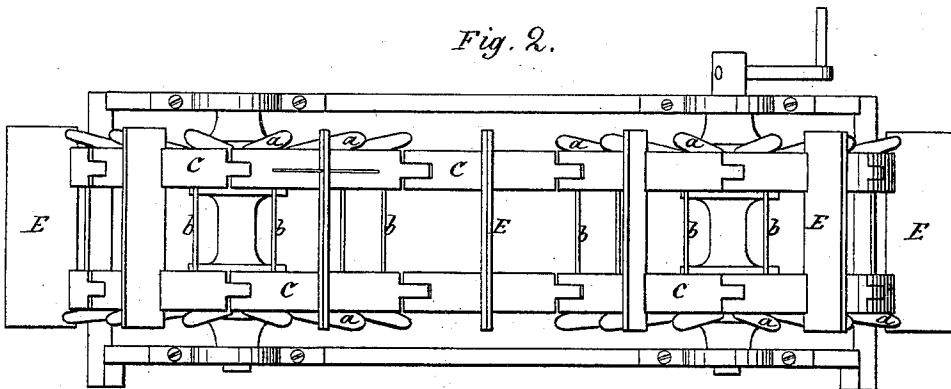


Fig. 2.



Witnesses.

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WILLIAM KEELER, OF TOWANDA, PENNSYLVANIA.

IMPROVEMENT IN ENDLESS-CHAIN PROPELLERS.

Specification forming part of Letters Patent No. 131,450, dated September 17, 1872.

To all whom it may concern:

Be it known that I, WILLIAM KEELER, of Towanda, Bradford county, and State of Pennsylvania, have invented certain Improvements in the Mode of Propelling Steamboats and other vessels or water craft, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side view of my boat-propelling apparatus. Fig. 2 represents a top view of the same.

Like letters and figures indicate the like parts.

I make two wheels, A, of any given diameter, each with a double row of arms or spokes parallel to each other, *a a a a*, and at given distances apart. The arms are transversely connected together, a little below the ends thereof, by round or angular metallic rods, or flat wooden rails, *b*. I then make a double set of chains of curved links C, adapted to the circumference of the wheels connected together at the ends by pins *d*, or otherwise, to encircle and revolve around both of the wheels A, which are on a horizontal line to each other. I cut round or angular notches, *e*, in the under side of the links corresponding to the distances apart of the transverse rods or rails *b*, and to

catch into them as the wheels revolve. I attach paddles or buckets, E, properly secured and braced to the outside of the links, and extending transversely from one row of links to the other, and beyond, if required, at given distances apart, so that when the wheels are in motion several of them will be perpendicularly submerged in the water and pulling a square pull at the same time, thus increasing the propelling power and speed of the boat or other craft.

The wheels may be attached to the sides, the front, the rear, or the center of the vessel.

Having thus fully described my invention, what I claim is—

The curved links C of the chains, adapted to the circumference and peculiar construction of the wheels, with the round or angular notches *e* cut into them so as to catch into the cross-bars or rails *b b* of the wheels when revolving, with the ends of the spokes or arms operating as flanges to hold the chains, with buckets or paddles attached, to their places.

WILLIAM KEELER.

Witnesses:

D. H. TURNER,
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